



1

SEQUENCE LISTING

<110> Sun, Yongming
Recipon, Herve
Ghosh, Malavika
Liu, Chenghua

<120> Compositions and Methods Relating to Colon Specific Genes and Proteins

<130> DEX-0255

<140> US 10/016634
<141> 2001-10-31

<150> US 60/244,258
<151> 2000-10-31

<160> 176

<170> PatentIn version 3.1

<210> 1
<211> 108
<212> DNA
<213> Homo sapiens

<400> 1
aatctcccta gatgctacta catgacattg attggcatct gatgtctatc tgattatcag 60
gaatttacag tttcagtttc caaagaacta tatgaaaaaaaaa ctattata 108

<210> 2
<211> 295
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (88)..(88)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (128)..(128)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (134)..(134)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (171)..(171)
<223> n=a, c, g, or t

```
<220>
<221> misc_feature
<222> (177)..(177)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (186)..(186)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (189)..(189)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (195)..(195)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (197)..(197)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (227)..(227)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (248)..(248)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (255)..(255)
<223> n=a, c, g, or t

<220>
<221> misc_feature
<222> (290)..(290)
<223> n=a, c, g, or t

<400> 2
ttcattccat atgtgagcat gcttaagctc cctggaaagaa ccatctgaaa tgttagtaaaa 60
caattaatga gaaaagaaca ggattganat tagctgtagg atagctcaga ggaaagaaga 120
ctcactantt cagnatgtac gagtactagc taaagtaagc agagaagaac ncacttnatc 180
```

ttcttnganc actgngnctt tttactggc ccttaccctt accctgnata gttacattgg 240
 cctctctngg tggantaatt tcccttaaga aaacagaagc tatttaacn aagcc 295

<210> 3
 <211> 153
 <212> DNA
 <213> Homo sapiens

<400> 3
 aagaaaatga aaaggcaagt aaaagttggg aaaagtatta ataataaata tgtccagtaa 60
 aggacttgca tgcaaaacac ataatgaact tctacaataa tagagagaca gacaactcaa 120
 aaataggcaa aagtttaag tgtacatgaa gcg 153

<210> 4
 <211> 236
 <212> DNA
 <213> Homo sapiens

<400> 4
 gaaagatgct ttatgaatct ttatataaat cttcccttctg ctgttaggtt tagtagagca 60
 acccccttaa tatcactatt tctggcgctt tgatttagttt cttgttgaa ttgtcaaaat 120
 atctaaaaat tttataaaaa tagaacctt aaggagaaaa aatcacacccg tgagcccaag 180
 agaactccaa acactcacca acatggggac caaggcacct gattattatg tattga 236

<210> 5
 <211> 719
 <212> DNA
 <213> Homo sapiens

<400> 5
 gcaacaacct gagggaaactg atttataatc agttgctaag gtggaaaact tgactttat 60
 aatgtatatg cagaaagaaa tgcttgctt agttgcttcc tgcttatctt taagactttc 120
 acactttct ttttttttgc ttgtcattat taatataaccg ttttggaaata cagaaggct 180
 aaattactaa cactacagat agcagttgtg gcaaataaaaa ataagacaga gtgaaactct 240
 taatcacata gctgtttct gagattttaa ttgccactgt cactgttgag tctgatttt 300
 aaatggtttc agcagttctc tctacttctc tctttccatc cttgctctt attaaacagt 360
 atttgatgcc tataatatga taacccttca acttaatttt tggagggtt cagaacaaat 420
 gagggaaatct ttgtttgtaa tgtataaccc atttggtaacc tgcaactgaa agacaatgaa 480
 attgattatt atccaggcat gactgtggct tatttaatc agataacttcc tctttcagc 540
 tgctgaagat acttgcaatc acctgtggct tttgtattgg tagatacatc caagaaaata 600
 ttgacttgaa aaaaattgtg ctttagagccc tgatctggac attttaaatt cacttaatt 660

gttttaaaaa ttgtgatata ttaatgaaat ttttatttc taactaatta tgaaccttt 719

<210> 6
 <211> 687
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (185)..(331)
 <223> n=a, c, g or t

<400> 6
 gtccaaatta ccaccactc ctgagggacc cagggacca gaagtcctcg tcagtcac 60
 acagcccatt ctgcccctct gctgtcctca ccagcctcggt ggagacccaa aatggtcttc 120
 ttcttaggaga ggctaggggg aagggcagag gagctaggtt actagcacag agctcaagcc 180
 tgatnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
 agtgctggat gtccaaactca acttggcaat gacggggac acatctcctt gtttattttt 420
 atgtttatTT atttttttt aatggagtct tgctctggtt gcactccagc ctgggtgaca 480
 cgacgtgaga ctctgtctca aaaacagact taaaaccctt taaaagtgtg tgataaacat 540
 cagcttgaca aatatgaacc cagcacccgt gaagcactgg cactatgctg ggtgctgagg 600
 gagatggcat gaacagaaaa gagagacaca ggcccaagga gggaaagtcca gtgtttggtg 660
 ggagatgggg atgttaacaa tcacaca 687

<210> 7
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 7
 ttttggtag ccagccagga gtgaagacga caggtttgct gtctcctttg cctgtgggtc 60
 tggggcccca gcctggggga gaccctgtac tccaggcatg ctatcaggac aacttcaacc 120
 cgaggggaga tcagctctcc cgcaacctgg tgccgctctc tgacagcaca acagaaccta 180
 aggggctaca ggtatgattca aggaacagtg tgctacagga cctcggtatt cctgctgaga 240
 gtcatttcct gtgctggatt taccatcaca gggaccagat ttatagaaaa atgaacatgt 300
 attgttgcta aatggagttg gtcatggagt ggaaactaac aatatgttca cctaaatgtg 360
 ctacaaccac tcaaggctcg caaacagatt cctatttga tggttggag agctgaattt 420

ctggaaacaag agatatacatgat taagactgtt gttacatgtt gcctacatga ctttc	475
<210> 8	
<211> 521	
<212> DNA	
<213> Homo sapiens	
<400> 8	
ttttggtag ccagccagga gtgaagacga caggttgct gtctccttg cctgtgggtc	60
tggggcccca gcctggggga gaccgtgac tccaggcatg ctatcaggac aacttcaacc	120
cgaggggaga tcagctctcc cgcaacctgg tgccgctctc tgacagcaca acagaaccta	180
aggggctaca ggatgattca aggaacagtg tgctacagga cctcggtatt cctgctgaga	240
gtcatttcct gtgctggatt taccatcaca gggaccagat ttatagaaaa atgaacatgt	300
attgttgcta aatggagttg gtcatggagt ggaaactaac aatatgttca cctaaatgtg	360
ctacaaccac tcaaggctcg caaacagatt cctatttaga tggtgttgag agctgaattt	420
ctggaaacaag agatatacatgat taagactgtt gttacatgtt gcctacatga ctttcaaaa	480
gcttggattcc cagtggcgct ctcaacagca gtcataaaac a	521
<210> 9	
<211> 743	
<212> DNA	
<213> Homo sapiens	
<400> 9	
gaaatttatg aggctacaag aatggtgaaa tgagatcagt cagtcaagtg tggaggaaag	60
taattacggc tggaaaagat ttaaactatt agaatagaga agactggatt agagaatatt	120
aatattctag aaaataacaa gcttatgaca ggaataactat atcagagtca agagaaaaca	180
aaagtatagg taaagactga atttatcata gccaagaca aggagcagga actgacattt	240
agtcaacagt atttatttgag tccctactat gtgtgccaaa ataaaaaatt aactaagtac	300
tggtaacag ataaagaaaat gattatgaaa gctggcaaatt aggaagttag agatgaaact	360
aaagatttag ttttacttgc acactgacct tgcaatttcc ccaatgtaat tttgtctgat	420
ctgagttgtg gcaagatatc ctgttttttg tacttacagg tattcctgct gagagtcatt	480
tcctgtctg gatttaccat cacagggacc agatttatacg aaaaatgaac atgtattgtt	540
gctaaatgga gttggcatg gagtgaaac taacaatatg ttcacctgta agtttttaag	600
tgctgtgcca agaaaggctc ttggaggcc attgcataa tctactgtt acatttgc	660
atttagtttc cggaaatat ttttaaacc tattccttagga gctattcaga accatagagg	720
ctatttcagt tccctatcg act	743

<210> 10		
<211> 548		
<212> DNA		
<213> Homo sapiens		
<400> 10		60
atgtaaaggc ttaaatcagc acctggacta catatataag gtgatcaata aatatctact		
ttggtatctg aatgcttcaa gatagcctt tggatcttca taaaaaagag tggtagtga		120
ttgttaagac ttacccgctc ataaatgttt tattacatac ttaatatgtg aagctatcaa		180
gtaaggaggt aaggaagtat gttaataggg aagaagatga taaaataccc aaataggaaa		240
ccataatgcc aactttctaa gcttaagctg actgtaacaa agaactggct ttgtacaaa		300
gaacaagtct tactggcttc atgcaatgca aacataaaa tcttacgtat ctgacagatc		360
aaggtagtca ggtagctctc ctgagcagtt ttccaccatg tggtagtca gggatccaag		420
cacattctat cacgaggctt agccatattt gagttttca cttcgggtat gaggatgagg		480
gagaaaagtgg gagagagtga aaagagggag aaaggtggaa aagggagaaaa gaaggagaag		540
gtggaaaag		548
<210> 11		
<211> 797		
<212> DNA		
<213> Homo sapiens		
<400> 11		60
actggcttag cacttacttc ttgggtgtgaa gagctagttc ttccctagag agcccaaact		
ctggagccag gtggatttag tggaaatcct agctctgcta aaggacgta ctgcctaag		120
tctcctcctc agtaaatagg atactagtga taacatcttc atagagttgt catgagaatt		180
aaatgaataa tatatgtaaa ggcttaatc agcacctgga ctacatatat aaggtgatca		240
ataaatatct actttggat ctgaatgctt caagatgcc ttttggcc ttctaaaaaa		300
gagtggttag tgattgttaa gacttaccgg ctcataatg ttttattaca tacttaat		360
gtgaagctat caagtaagga ggtaaggaag tatgttaata gggagaaga tgataaaaata		420
cccaaataagg aaaccataat gccaaacttcc taagcttaag ctgactgtaa caaagaactg		480
gctttgtAAC aaagaacaag tcttactggc ttcatgcaat gcaaacatTT ttttcttacg		540
tatctgacag atcaaggtgg tcaggttagct ctcctgagca gttttccacc atgtggtagt		600
tcagggatcc aagcacattc tatcacgagg cttagccata ttggagttt tcacttcggt		660
gatgaggatg agggagaaag tggagagag tgaaaagagg gagaaaggtg gaaaagggag		720
aaagaaggag aaggtggaaa ggagagagag agaaattttagaa aaagtggaaa aaaaaaaaaa		780
aaaaaaaaaaaaa aaaaaaaaaa		797

<210> 12
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 12
 ccatatcttg ttttgacca gtgaagggga aagaaaagaaa gtaattctag aacaacctac 60
 tacttacttt agagcttcac ttttatatca tctatatttg acttgaaaac catctgtgtt 120
 tttgtctttg tggtcagcca ttattgtttg ttttgccatg atatatgtcg gaatgatatt 180
 atttgactct cctttaagta ctcctgctt ctggagtaa ggagatccta ccagtatcta 240
 acagaaaatc ttgagcttgc agaataacag aaaagaaaaa aaaaacaaaa acacaacttg 300
 ccaaaacact gaaactccct ctacttatga aataaaca 360
 tcattatggc caaatggtgt ttgggcagaa tcacccctgct gaggtcacccg tctgaatttt 420
 cactgcctgt ttcatcacaa ctccccctca gtttgccatg gacatccatg aggaggcaat 480
 gagcttgaga gtaacgtttc agtataaaat ggctttctct taaaaacctg atgtcatagt 540
 atggctact agcacttc 558

<210> 13
 <211> 596
 <212> DNA
 <213> Homo sapiens

<400> 13
 aaagatgaca tggatttagct tcaagtaaca cataatgtgg ctggagtcag ctgatctta 60
 tgctgaaagt gtcaacagta gtgacaaata cttcaagtaa cgggtcaaaa gtctaaagaca 120
 gtcattctgc cagaaatggc ctggacttc cccatacatg ggacacgtag atcaacttcc 180
 tccaaagaacc accaacctgg catgcagtga tgacccctgc agtagacagg gatttaggct 240
 tgattgttgt tcattctttt ggagacataa ccctaattgt gaacttctaa attaatggcc 300
 tgacaattag atcagcagct aagataaatt tcagtttgca gccccaaaga agatgttctt 360
 aatttagacag ttaatcattt tcaatatgga agcctaaaca cgtagaatgt ggcaataacc 420
 cggaaactctc agttctgaca attgagtgaa gtaatcaccc cagattcagg ttcttcattg 480
 gctgacaatg agatcaaaca cccacaccag cccagtgaac accatgaggt gtcatcttcc 540
 tggcccatta gtgaaccagg aacagatatt tagaaaatat tcagtaaattt ggggag 596

<210> 14
 <211> 1114
 <212> DNA
 <213> Homo sapiens

<400> 14

gtagacattt aagtttaaa tcctgtaaag agaagcagca gagatgcaac ataggctcag	60
actttaagca gctctaattt catggcttc ctgggcctcc accatattgc catagggcct	120
gtcacatgct tatgcacatcct actggctgca gcagtgcattc ctgaagacag ctcagtatag	180
ccatgggcta cttttcttagt catgggctgt ggaacctgga acatgtgacc agaataccac	240
tgaccctgtg gaccagcaag cctaagttaa aggcagccat catgaggatg aaaaggagac	300
cctcaccagc cagaagggga tgtatgggt aagcagaacc ctattagaga gaaaagccaa	360
caggaatgac tggaaaaca gcaggagggg acaaaaattg gtgtgcctt gtgacacaaa	420
aaactctggg atgacggagt tgatgacaat cgaggccaaa atcatcttca acatacccta	480
gttctaaagt atgcactatt ctccccctca gcacagccct ttgggcctt tacacaatgg	540
tgacttctaa ttgggtccct actcagatt tagaactccc aagtaatgtt cccaaatgga	600
tcatattcac gaggagtagt accagtgaat taactggtc tcaaaataca attgcacatt	660
tcagacactg cttaaagtt gtgtcctctc atttctcat tcctgtttagt ttataatagg	720
cagtcttctt cttattcacc aggggattcc atccctctga ttcaggacca tggatatgg	780
aatcgccctg ctttctcatc ttcaagccctcg cgctgtacag gatccatcct cttagcactt	840
tttttccctt tagtaaacta ttgctgtgt aacacagagaa atactcatag ctctgatcac	900
aaatctgagt cagatgcctc ttgaagaatg gacttctgag gagcaccgta ctgcggccag	960
cacagctctc acacaggagt ttgctgaaag tctcctgcct gtgtgcctcc cagtagatgc	1020
tctgtgaggg ccgtaacccc agggtataag taactcaact agaatatgtg caatacactt	1080
ctctgtgtcc tgatgtttaaa cttaaaatgaa aata	1114

<210> 15
 <211> 1185
 <212> DNA
 <213> Homo sapiens

<400> 15	
gtagacattt aagtttaaa tcctgtaaag agaagcagca gagatgcaac ataggctcag	60
actttaagca gctctaattt catggcttc ctgggcctcc accatattgc catagggcct	120
gtcacatgct tatgcacatcct actggctgca gcagtgcattc ctgaagacag ctcagtatag	180
ccatgggcta cttttcttagt catgggctgt ggaacctgga acatgtgacc agaataccac	240
tgaccctgtg gaccagcaag cctaagttaa aggcagccat catgaggatg aaaaggagac	300
cctcaccagc cagaagggga tgtatgggt aagcagaacc ctattagaga gaaaagccaa	360
caggaatgac tggaaaaca gcaggagggg acaaaaattg gtgtgcctt gtgacacaaa	420
aaactctggg atgacggagt tgatgacaat cgaggccaaa atcatcttca acatacccta	480

gttctaaagt atgcactatt ctccccctca gcacagccct ttgggccttt tacacaatgg	540
tgacttctaa tttgggtccct actcagattt tagaactccc aagtaatgtt cccaaatgga	600
tcatattcac gaggagtagt accagtgaat taactgggtc tcaaaataca attgcacatt	660
tcagacactg ctttaaagtt gtgtcctctc attttctcat tcctgttcag ttataatagg	720
cagtcttcct cttattcacc aggggattcc atccctctga ttcaggacca tggtatatgg	780
aatcgccctg ccttctcatc ttcaagcctct cgctgtacag gatccatcct cttagcactt	840
ttttccctct tagtaaacta ttgctgtgtt acacagagaa atactcatag ctctgatcac	900
aaatctgagt cagatgcctc ttgaagaatg gacttctgag gagcaccgta ctgcggccag	960
cacagctctc acacaggagt ttgctgaaag tctcctgcct gtgtgcctcc cagtatgagc	1020
tctgtgaggg ccgtaacccc agggtataag taactcaact agaatatgtg caatacactt	1080
ctctgtgtcc tcatgttaaa cttaaaatga aatagtttc agaataaaaaa taaatttgta	1140
tatattaaaa aaacaaaaaaa aaaaaagatc tttaatataag cggac	1185

<210> 16
 <211> 413
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (138)..(138)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (145)..(145)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (151)..(151)
 <223> n=a, c, g or t

<400> 16 acaataatgtt tttatgtgtt taggtctgac ggtatgtctt cttattgttg acttttaat	60
ttattaaatt gtagtttagg agaatgagct aatataatct ctaatagctt agaataattg	120
aagtaattta ttattnat ttatnattt naccattatt attaacaact ttgtgaacaa	180
aagcatttat ttaaatgttt tatggttatt tgtattctct attttaggaa ttcaaagttt	240
tatattcaac ttattgagat tattatagaa atgaggtata tttgagaggg tcaaataattc	300
taaaagaata tttcagacac cacccctcc agcaacaaaa atagctacaa accaatataa	360

attcatgtta	gttattttca	tacatattga	aaactttact	gtacattaaa	agg	413
<210>	17					
<211>	517					
<212>	DNA					
<213>	Homo sapiens					
<220>						
<221>	misc_feature					
<222>	(138)..(138)					
<223>	n=a, c, g or t					
<220>						
<221>	misc_feature					
<222>	(145)..(145)					
<223>	n=a, c, g or t					
<220>						
<221>	misc_feature					
<222>	(151)..(151)					
<223>	n=a, c, g or t					
<400>	17					
acaaaatgtt	tttatgtgtt	taggtctgac	ggtatgtctt	cttattgttg	acttttaat	60
ttttaaatt	gtatgtttagg	agaatgagct	aatataatct	ctaatacgctt	agaataattg	120
aagtaattta	ttattnat	ttatnattat	naccattatt	attaacaact	ttgtgaacaa	180
aagcatttat	ttaaatgttt	tatggttatt	tgtattctct	atttgttagga	ttcaaagttt	240
tatattcaac	ttattgagat	tattatagaa	atgaggtata	tttgagaggg	tcaaataattc	300
taaaagaata	tttcagacac	cacccctcc	agcaacaaaa	atagctacaa	accaatataa	360
atttcatgtt	agttattttc	atacatattt	aaaactttac	tgtacattaa	aaggttgtac	420
agacagccct	ccatatctgt	gggtttcaca	tccatgtatt	caaccaagca	tggatcaaaa	480
atattcagta	aaaaaaaagt	cgacgcggcc	gcgaatt			517
<210>	18					
<211>	502					
<212>	DNA					
<213>	Homo sapiens					
<220>						
<221>	misc_feature					
<222>	(292)..(292)					
<223>	n=a, c, g or t					
<400>	18					
cacacagaat	gcacaaaggc	agggctgctc	ttttattttg	ggtggcgtgg	gtggaaagttag	60
gcaatggagg	cacagttgtc	aaagccactg	gtctaatcta	actattcttc	tctttccac	120

tttacagagg gtgttaacttg gcccaagaaa tcgtgtatgtg agtaggtcac acagtgttga	180
gggccaaaac cctcgactcc gttggggagtt aaaggggagg aagtggacat ttcctttgaa	240
cctaataata agcaggtgag gttttgtatt ctcattttc acagtgcag anaattttgt	300
ttagaaattc tagttaagtc atttacccaa agccctaaag ccagtaaaca gcaagtggga	360
atcaaaccctt agtcccttga catgccaaac cagttttttt ccactagacc accccttccc	420
ccattactgt aaactccatc tctccgctgc tgcgttgc ttcttgcgtcc gtacagaaat	480
aaaagtttgc caccaaaaaaa aa	502

<210> 19
 <211> 2961
 <212> DNA
 <213> Homo sapiens

<400> 19	
cctgctgctc ctggggagggg ctcaggccat ttgattctgc ctgggtgggtt cagggtgtcc	60
tggctagcca ccaagacacg ggagagcaaa gcccggccaa acccaggggc agtgggtgtcc	120
agcaggcattc aggacatgcc gtggcccaca catgcccttc tccacaggtg ccatcatctc	180
ctttcttctc ctgttagtga tggcttcatt ggcctcaggt gacaccgcct tctagcccaag	240
gccactggat ccagccagag cgtctgtca tgcgcgcagg gaggtgtggg gaggtctggc	300
cccacctggc aagtttatacg gctgcttgcg gacataagat gggtaacagaa gaggtttcag	360
ggctcagcag atgttgcgtt gggagtgcgc ccaggcaagg tggccatgg acagaagatg	420
gaaggtcagt cgtggctcc ttccagaagg aaagagattt tagcaggaag agacaggcaa	480
gaaaaggaat tggttttca ggcagagcgg tacttttta aattgacaaa ttttaagcat	540
acagaaaagt agagaggacg aacctccaaa catcagccct tagattccag tacatcctgc	600
cttggtagct gacgtcacga acgctgtgac ctgtccctct gcactccatc atagcatctc	660
taaaacggag gacatttcct acctcagcac aacttcattt tcacaaaaga gaacattttg	720
agcaaaagt tggaaagcagg caaaagtatg gtttgcgttgc gaatggcatg aatgaatgag	780
tcatgggctg gacccggccc cgcagaaaga gcagaggagg cctgtctctgg tgttaggagtt	840
gaagccaaaga ctcagcatgc aggacaagga gcccagcctg gtggcatggg ctgtggcttc	900
tccagtgccc ccataggaat ggcctgggg ctgggacttg tggggacggc ggccacaaga	960
ggaggatctt cagcatggcc tgacagcacc tgtaatgtag gcaggcaatg ggctcctcca	1020
ggtggcagga acaccgtgag gagcatgcaa cgtgtggag accatggggc atgtgacctc	1080
cgggcacacc ctggacagac ctgggtgaga ggtggctgg gacgccagga cagtgaaggg	1140
cttcaagggtg tggttgcctt ttgtccttat acaggtgacc tgcatggcg ggtgaggtcc	1200

atcagaatgc tctagaaacag gacaactgag gtcccggtcg ccccgctcaa cacgccatga	1260
ttccttagact gcccgtgagag gtcagggttt aaataggggtg tggcccggtca aggaccctga	1320
gggatgtgag gccagacagc tccttggtgg ccgcctgcac gggaaagctga gtggcccttt	1380
ggaacaggaa gtgccttgc caagttacc cggggccggg cccaccttgg actccctctg	1440
gagagaacgg ctggcctgtt cgccctcctt ctccttcctt ccaaaataac atgtccaggt	1500
cccttggtaa gaatgctgca gctggggtca gtctccaaac tggagtttgg tggctaaaat	1560
gcccgccttt ctgccccaa tttcacacat ggatgatggt cctggttcag cagggaaagat	1620
tctcttggac ccgtgtctgc tggggggaa gtggagaaag ccgcctgtt ctgcctccat	1680
tttgaaacgt cttttctgtt cggaggacta aaggaagcca gagctggttc agatgttcat	1740
gagcacctgt gccagccct gcccgtcaca cttgaggaca ccaaggctgt ggtctgtgca	1800
gtgaatcggg gcagtggggg gacttcatgg ttagaaacac aagctggagg ccggatgcgg	1860
tggctcatgc ctgtaatccc tgcactttgg gatgcctgag gtcaggagtt caagaccagc	1920
ctggccagca tggtaaaacc ctgtctctac taaaaataca aaataaaaat taactgggtg	1980
tgtggcaggc acctgtaatc ccagctactt gggaggctga ggcaggaaaa tcacttgaac	2040
ccgggagggtg gaggttgcag tgagctgaga tcgcaccatt gcactccagc ctggcaaca	2100
agagtgaacc tccgtctcaa aaacaaaaca aaacaaaag tagattctaa ttcaggaggt	2160
tcggagtgtg tgcatttcta atgcgctcca aggtgctgtt gctgctgctt agaaccatca	2220
tttcagtagt aagggtctaa aacaacacga ctcacaagac ctcaaccac cagccaggt	2280
ggaaaccaat tcacaaacgt ctcagtgaaa tgattctgtt gatgctggtg cgcaattcta	2340
catttatgtg gggaggagg tcaggacaga agttgaggga cttgggaccc caaagcagat	2400
aagggtgtgg ggtgcagatc ttgctctagg atcctgaagc gagtctctgg aggaggtcag	2460
gcaaaatggt ggcaaaactt tatttctgtt cggatcaaga aggagctgac agcagcggag	2520
agatggagtt tacagtaatg ggggaagggg tggtctagtg gaaagaagct ggtttggcat	2580
gtcaaggac ttgggttga ttcccacttg ctgtttactg gctttagggc tttggtaaa	2640
tgacttaact agaatttcta aacaaaattt tcttgcactg tgaaaaatga gaataaaaa	2700
cctcacctgc ttattattag gttcaaagga aatgtccact tccctccctt taactcccaa	2760
cggagtcgag gttttggcc ctcaacactg tgcgtacccac tcacatcactg atttcttggc	2820
ccaagttaca ccctctgtaa agtggaaagag agaagaatag ttagattaga ccagtggctt	2880
tgacaactgt gcctccatttgc cctacttcca cccacgcccac ccaaaataaa agagcagccc	2940
tgcccttggc cattctgtgt g	2961

<210> 20
 <211> 653
 <212> DNA
 <213> Homo sapiens

<400> 20
 gtagaacaga aagcctccct gctcaactggc ctttccctt ccctcaactgg ctgcccattgg 60
 agccaggatc agcatggaa caatcaagga ggcagggct tatcagtact atggaccct 120
 acactggctc tgcctggtgg ttcttcttt cgcataccaa agacagaaat taagcctcca 180
 agagtggtaa ctgacactcg 240
 tcacacttgg tgggtgtgg aaaggattca aatgttagtc
 tttcttcttc ttcatctatc atggccctg tcctggaggc aagtcgtctg gggctcagaa 300
 aacacccctg ttgccactga ttggaattcc aagggtctgg gtgaagtgg gatgggcctc 360
 cagcttgcct ccagcctgaa aaaatagtag aggggtgtga ggctggaaag ggaggtgggg 420
 ctcatgttgc acagggcctg agccagggag cttggccttc attctgagta ctgtggcagc 480
 cctggaaagg tttgtacac agagggatat tgcattttt ggaaagatcc ctttggctgc 540
 ttaggttagag aagggttca agagggcagg aaggacagg actacagaag gggctgcttc 600
 agagtccaga ttaaggaagg agaggcctgg gcagtcagaa aggaagagaa gcc 653

<210> 21
 <211> 765
 <212> DNA
 <213> Homo sapiens

<400> 21
 gaacagaaag cctccctgct cactggcctt tccccttccc tcactggctg cccatggagc 60
 caggatcagc atggaaacaa tcaaggaggc aggggcttat cagtactatg gacccctaca 120
 ctggctctgc ctgggtgttc ttctttcgc ataccaaaga cagaaattaa gcctccaaga 180
 gtggtaactg acctcggtca cacttggtgg gtgtggaaa ggattcaaat gttagtctgt 240
 tctcttcttc atctatcatg gtcctgtcc tggaggcaag tcgtctgggg ctcagaaaac 300
 acccctgttg ccactgattg gaattccaag ggtctgggtg aagtggggat gggctccag 360
 ctgcctcca gcctgaaaaa atagtagagg gtgttgaggc tggaaaggaa ggtggggctc 420
 atgttgtaca gggcctgagc cagggagctt gggcttcatt ctgagtactg tggcagccct 480
 gggaaaggattt gtacacaga gggatattgt catttttga aagatccctt tggctgctta 540
 ggttagagaag ggcttcaaga gggcaggaag ggacaggact acagaagggg ctgcttcaga 600
 gtccagatata aggaaggaga ggcctggca gtcagaaagg aagagaagcc ggatgtggtg 660
 gcttgtatct tcaatcccag cactttttag aggccttggat gggaggatc actttgagcc 720
 caggagtttc aaaacccagt tttggcaaca tagtttagact gcttg 765

```

<210> 22
<211> 148
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)..(9)
<223> n=a, c, g or t

<400> 22
ctcggaatnc ggctcgagga gaattttgg agatccttag tctgctattc ttactgacat      60
tagccttatg ttgtttagat tagtatagaa tagtattcga aatgatgtgg acaattttgt      120
caaatgcttt taagatattg tacatctg                                         148

<210> 23
<211> 398
<212> DNA
<213> Homo sapiens

<400> 23
ctctggacca attattgatt tgcaagttcc tgtgaaatgt tttatcaccc agtgtgtttt      60
gtctgtgtac aggaagcact ggatacactg gctaggtgtg tgcttttaag taacattctt      120
ctctgattcc tttccttcaa agtgggagat actggtagca tctacctacc ctgcaaggat      180
ttaatgagtt ttaatgacat gagaaatgct tagatttcag ggatttgact aaacccaaat      240
acctgggcca tatttttagc caggagccag ggaatatttgc cactaagcca ctggctgacc      300
caaaacttct ctcttaagt catttagcca aacagcaaat tagggagcca gcagctcatt      360
ttgggggtga tgtttgtat gagaagttgg tgaacctg                                         398

<210> 24
<211> 523
<212> DNA
<213> Homo sapiens

<400> 24
tacaacttta gttttgtgc tacttaggag agaaaagcag atattgcctt attttgtgt      60
ccctatccat ttaatttagaa gctcaatgaa aatttttac attatattat cacctctatg      120
tggaaatattt ttaaatgttt tagaaagttt gaaatttcatt tttaaatgtg aatcattatt      180
gtttgtgtgg ggggaggaat gtcaagttgg aattatgaat caggcttgc cttaccaagt      240
acttttataat taataggat tattttgaat ttctgtataa cgtatgtatc ctctataata      300
catagagaat gcaaaaggaa aataatttga aagctatcct attttatctt gaaagcaatc      360
ttctaaaagc gcattataca tttatgtaa cgcttatttg gaattgttcc ttttccattc      420

```

tcttttcctt taaagaaaatg	gtaggggaaa aacatctggt	ataccctata gctgtcttac	480			
tgtagtcaag gtaatatact	acgaaagaac acacgtaccc	tgg	523			
<210> 25						
<211> 5982						
<212> DNA						
<213> Homo sapiens						
<220>						
<221> misc_feature						
<222> (5780)..(5780)						
<223> n=a, c, g or t						
<220>						
<221> misc_feature						
<222> (5885)..(5885)						
<223> n=a, c, g or t						
<400> 25						
atggggccgc gagccaggcc	ggcgcttctc ctctgtatgc	ttttgcagac cgccgtcctg	60			
cagggggcgct	tgctgcgtga	gtccgagggc	tgccggcgaa	ctaggggcgc	ggccgggggtg	120
aaaaaatcga	aactagctt	ttctttgcgc	ttggggagttt	gctaactttg	gaggacctgc	180
tcaaccctat	ccgcaagccc	ctctccctac	tttctgcgtc	cagacccctgt	gagggagtgc	240
ctaccactga	actgcagata	ggggtccctc	gccccaggac	ctgccccctc	ccccggctgt	300
cccggtctg	cggagtgact	tttggaaaccg	cccactccct	tccccaact	agaatgcttt	360
taaataaatac	tcgttagttcc	tcacttgagc	tgagctaagc	ctggggctcc	ttgaacctgg	420
aactcgggtt	tatttccaat	gtcagctgtg	cagtttttc	cccagtcatc	tccaaacagg	480
aagttcttcc	ctgagtgctt	gccgagaagg	ctgagcaaac	ccacagcagg	atccgcacgg	540
ggtttccacc	tcagaacgaa	tgcggtggc	ggtggggcg	cgaaagagtg	gcgttgggga	600
tctgaattct	tcaccattcc	acccactttt	ggtgagacct	gggggtggagg	tctctaggg	660
gggaggctcc	tgagagaggc	ctacctcggt	cctttcccc	ctcttggcaa	ttgttcttt	720
gcctggaaaa	ttaagtatat	gttagttttg	aacgtttgaa	ctgaacaatt	ctctttcgg	780
ctaggcttta	ttgatttgca	atgtgctgtg	taattaagag	gcctctctac	aaagtactga	840
taatgaacat	gtaaagcaatg	cactcaactc	taagttacat	tcatatctga	tcttatttga	900
ttttcactag	gcatagggag	gtaggagcta	ataatacggt	tattttacta	gaagtttaact	960
ggaattcaga	ttatataact	cttttcaggt	tacaaagaac	ataaataatc	tggtttctg	1020
atgttatttc	aagtactaca	gctgcttcta	atcttagttg	acagtgattt	tgccctgtag	1080
tgttagcacag	tgttctgtgg	gtcacacgcc	ggcctcagca	cagcactttg	agttttggta	1140

ctacgtgtat ccacattta cacatgacaa gaatgaggca tggcacggcc tgcttcctgg	1200
caaatttatt caatggtaca ctgggcttgc gtggcagagc tcatgtctcc acttcatagc	1260
tatgattctt aaacatcaca ctgcattaga ggttgaataa taaaattca tggtagcag	1320
aaatattcat tgtttacaag tgtaaatgag tcccagccat gtgttgact gttcaagccc	1380
caagggagag agcagggaaa caagtcttta ccctttgata ttttgcattc tagtggaga	1440
gatgacaata agcaaatgag cagaaagata tacaacatca ggaaatcatg ggtgttgtga	1500
gaagcagaga agtcagggca agtcactctg gggctgacac ttgagcagag acatgaagga	1560
aataagaatg atattgactg ggagcagtat ttcccaggca aactgagtg ggctggcaag	1620
ttggattaaa aagcgggtt tctcagcact actcatgtgt gtgtgtgtgg gggggggggg	1680
cgcgtgggg gtgggaaggg ggactaccat ctgcatgtag gatgtctagc agtacctgt	1740
cctccctact cactaggtgc taggagcact cccccagtct tgacaaccaa aaatgtctct	1800
aaactttgcc acatgtcacc tagtagacaa actcctggtt aagaagctcg ggttgaaaaa	1860
aataaacaag tagtgctggg gagtagagggc caagaagtag gtaatggct cagaagagga	1920
gccacaaaca aggttgc ggcgcctgta ggctgtggg tgaattctag ccaaggagta	1980
acagtgatct gtcacaggct ttaaaaagat tgctctggct gctatgtgga aagcagaatg	2040
aagggagcaa cagtaaaagc agggagccca gccaggaagc tgttacacag tccaggcaag	2100
aggtagtgga gtgggctggg tgggaacaga aaagggagtg acaaaccatt gtctcctgaa	2160
tatattctga aggaagttgc tgaaggattc tatgttgtgt gagagaaaga gaagaattgg	2220
ctgggtgtag tagctcatgc caaggaggag gccaggaga gcagattcct gagctcagga	2280
gtcaagacc agcctggca acacagcaa accccttctc tacaaaaat acaaaaatta	2340
gctgggtgtg gtggcatgca cctgtgatcc tagctactcg ggaggctgag gtggagggt	2400
ttgcttgagc ccaggaagtt gaggctgcag tgagccatga ctgtgccact gtacttcagc	2460
ctaggtgaca gagcaagacc ctgtctcccc tgacccctg aaaaagagaa gagttaaagt	2520
tgactttgtt ctttatttta attttattgg cctgagcagt gggtaattt gcaatgccat	2580
ttctgagatg gtgaaggcag agggaaagagc agtttgggt aaatcaagga tctgcatttg	2640
ggacatgtta agttttagat tccagtcagg cttccaagtg gtgaggccac ataggcagtt	2700
cagtgtaaaga attcaggacc aaggctggc acgggtggctc acttctgtaa tcccagcact	2760
ttgggtggctg aggcaggtag atcatttgag gtcaggagtt tgagacaagc ttggccaaca	2820
tggtaaaacc ccatgtctac taaaaataca aaaattagcc tgggtgtggg ggcacgcct	2880
atagtcccag gtttcagga ggcttaggtt ggagaatccc ttgaacccag gaggtgcagg	2940

ttgcagttag	ctgagattgt	gccactgcac	tccagcctgg	gtgatagagt	gagactctgt	3000
ctcaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aactgaagga	attattcctc	aggatttggg	3060
tctaatttgc	cctgagcacc	aactcctgag	ttcaactacc	atggctagac	acaccta	3120
attttctaga	atccaccagc	tttagtggag	tctgtctaat	catgagtatt	ggaataggat	3180
ctgggggcag	tgaggggggtg	gcagccacgt	gtggcagaga	aaagcacaca	aggaaagagc	3240
acccaggact	gtcatatgga	agaaagacag	gactgcaact	cacccttcac	aaaatgagga	3300
ccagacacag	ctgatggat	gagttgatgc	aggtgtgtgg	agcctaaca	tcctgctccc	3360
ctcctactac	acatggtaa	gcctgttgc	tctgtctcca	ggttcacact	ctctgcacta	3420
cctcttcatg	ggtcctcag	agcaggacct	tggtcttcc	ttgtttgaag	cttgggcta	3480
cgtggatgac	cagctgttcg	tgttctatga	tcatgagagt	cgccgtgtgg	agccccgaac	3540
tccatgggtt	tccagtagaa	tttcaagcca	gatgtggctg	cagctgagtc	agagtctgaa	3600
agggtggat	cacatgttca	ctgttgactt	ctggactatt	atggaaaatc	acaaccacag	3660
caagggtatg	tggagagggg	gcctcacctt	cctgaggttg	tcagagctt	tcatctttc	3720
atgcatcttgc	aaggaaacag	ctggaagtct	gaggcttgc	gggagcaggg	aagagggaag	3780
gaatttgctt	cctgagatca	tttggcctt	ggggatggtg	gaaataggga	cctattcctt	3840
tgttgcagt	taacaaggct	ggggattttt	ccagagtccc	acaccctgca	ggtcatcctg	3900
ggctgtgaaa	tgcaagaaga	caacagtacc	gaggctact	ggaagtacgg	gtatgtggg	3960
caggaccacc	ttgaattctg	ccctgacaca	ctggatttgg	gagcagcaga	accaggggcc	4020
tggcccacca	agctggagtg	ggaaaggcac	aagattcggg	ccaggcagaa	cagggctac	4080
ctggagaggg	actgcctgc	acagctgcag	cagtgctgg	agctggggag	agggttttg	4140
gaccaacaag	gtatgttgg	aacacactc	tgcccata	ctctagttgc	agagtggagg	4200
agttgcagg	gcacgaaatc	cctgggttgg	gtttcagagg	tggctgaggc	tgtgtgcctc	4260
tccaaattct	gggaagggac	tttctcaatc	ctagagtctc	taccttataa	ttgagatgta	4320
tgagacagcc	acaagtcatg	ggttaattt	ctttctcca	tgcataatggc	tcaaaggaa	4380
gtgtctatgg	cccttgcttt	ttatthaacc	aataatctt	tgtatattta	tacctgttaa	4440
aaattcagaa	atgtcaaggc	cgggcacggt	ggctcacccc	tgtatccca	gcactttggg	4500
aggccgagggc	cagcagatca	cctgaggtca	ggagtttgag	accagcctga	ccaacatggt	4560
gaaaccgc	tctaaaaaaaaa	tacaaaaatt	agctggtcac	agtcatgcgc	acctgtatc	4620
ccagctactc	gggaggctga	ggcaggagaa	cgcgttgaac	ctgggaggta	gaggctgcag	4680
gttagaagta	cagaattcct	gaagcacctt	agggggtaag	tcatgtaggga	cttaggtaag	4740
taacgtgtgg	aaaagatagt	ggtccattgt	agagagagtg	cactagaata	caacttcggg	4800

tcagggaagc agcaattata ggtccaccta cagggaatga tgcagtctcc tgccttgggt	4860
aacatgttag tggcaaagct ttacagggtc caagcagggg acccacttca agagagtgac	4920
gattgcaatt aatgacacat aaaggaattt gttttccctt atctaggtga ataggggatc	4980
tttagtaagt gtaagtaact gatgacagcc ctggcttttgc tctaacagta atataacaga	5040
gtaatagcta ctactaactg agttcccta tgtgtcaagc tctgtgcaag acactttaca	5100
atgtcatttgc acttaattct cccctctcag agtcagaatg atcccaattt tcataaagga	5160
ggaaaatgag ttcacaagaa ttacattcct taaggtaaca ctggtaagtgc gctcagttgg	5220
gattcaaaacc cagggtacgt gtgttcttc gtagtatattt accttgacta cagtaagaca	5280
gctatagggat ataccagatg tttttccctt accatttctt taaaggaaaa gagaatggaa	5340
aagagacaat tccaaataac tttcaaataa atgtataatg cgctttaaa agattgcattt	5400
caagataaaaa taggatagct ttcaaattat ttccttttgc cattctctat gtattataga	5460
ggatacatac gtattacaga aattcaaaaat aatccctattt aatataaaaat tacttggtaa	5520
ggcaaaggctt gattcataat tccaaacttgc cattcctccc cccacacaaaa caataatgtat	5580
tcacatttaa aaatgaattt caaactttctt aaaacattta acaatattcc acatagaggt	5640
gataatataa tgataaaaaat tttcatttgc cttctaaat aatggatagg gcacacaaaa	5700
taaggcaata tctgcttttc ttccttaagt agcacaaaaa ctaaagttgt atagtgtact	5760
acttttgaa gagacattttt taacttagtaa tgataatttgc tcttaattca taaacacttc	5820
aaatcacata actgaatacata tttcaacca ggaggatgca acattacccc aaaataccgaa	5880
gtcanagaaa ttatttttgt tgagacaacc aggtacaaaa ctcttaatttccatgggtt	5940
tctgggcctt tttaccttgc cttaacactt aattcccgaa	5982

```
<210> 26
<211> 820
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (502)..(565)
<223> n=a, c, g or t
```

```
<400> 26
caaacaatat gtgtgagatt taatgatttt tgtcctatTT tttttctatt tattatTTaa 60
tactttcagg ggtatcctag taaaagcgac ttccatgtg cctgcctgtg cctttctgtg 120
ccagggtctt aagaaatgtg tgtgggtttc ctctgtggct ctgacactcc atcaaacacc 180
aggacttgtg cacgcaggtg agaagcatac ccaggtgcct cagagatatt gaagagggtc 240
```



```

<220>
<221> misc_feature
<222> (175)..(175)
<223> n=a, c, g or t

<220>
<221> misc_feature
<223> n=a, c, g or t

<400> 28
gacacttcat gttccagctt ctcgcttcaa gtcctgaag gtcagtgctt aagagcaggg      60
tcaaggagtg cagaacccat tggtgagatt tacaggaccc cccacccaac cgtagcatg      120
ccgtctgttag catgggaggg gcctggagca tagcagggcc tctcacgggc tttgntttca      180
ggttgacatt t      191

<210> 29
<211> 998
<212> DNA
<213> Homo sapiens

<400> 29
ggccgcataat tttttttt tttttttt ttttaaaggt agaaaataaac acaaccttt      60
atttttatt ttcatttgtt ttgagatgga gtttcaactct tgcacccag gctggagtgc      120
aatggtgtga tctcggtca ctgcaacctc cacctccag gctcaagtga ttctcgtcc      180
ttggcctccc aagtagctgg gattacaggc atgcactaca acgcccagct aattttgca      240
tttttagtag agatagggtt tcaccatgtt ggcaggctg gtcctcaact cctgacttca      300
ggtgatccat ccatcttggc ctcccaaagt gctggattt caggcgtgac agctgtgcc      360
ggcccacctt ttaaatgtca acctgaaacc aaagccctg agaggccctg ctatgtcca      420
ggcccccctccc atgtacaga cggcatgcta acggttgggt ggggggtcct gtaaatctca      480
ccaatgggtt ctgcactct tgaccctgtt cttaagcaact gacccctt cagg agttgaagg      540
gagaagctgg aacaatgaag tgtctattct gcttcttctt gcaaatgtg caactacaga      600
aagacagagc aaattccaga ttgtgagcag ccacctgcat cctctatgcc tgagcggccc      660
agccatgaga gccagccgac cccacagatg atgcccctt cagcaccatc cagggccgag      720
gagctggggc aaaggccctgg atagcagtgc ctctggttt caggtacagc agagcccagg      780
ggggtcccaa gtcagcagtc gaggttctgc aatgctcaga acacaggacc aacagacagg      840
tctgtactgc ccacccctca gttctttaca gtgaagagaa gcgctggact tcagagacac      900
ttaggaaaca aatttcagac actgctacaa cctgatgtct ctgagacatc cacacaaaaa      960
atggacaagg aagtcttaggt ttccctttt ctcatca      998

```

```

<210> 30
<211> 282
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)..(5)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (17)..(17)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (29)..(29)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (110)..(110)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (128)..(217)
<223> n=a, c, g or t

<400> 30
accangggtc cgaccanggg tacgaccang ggtccggctt gatctcactt atatatggaa 60
cttaaaaact acacatagaa acagggtaga atggtagtta tccaggctcn ggaggaagag 120
aaaacaannn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnngta tatggaaaat ttgctgagag 240
actagatttt aggtattcta cctcaattaa aaaggtaatt gt 282

<210> 31
<211> 1225
<212> DNA
<213> Homo sapiens

<400> 31
ggggaaagac caaccagttg gggcttctc ccagggctcc cgggggctgt gtctgagtgt 60
ctgtgttggc tgtttggttt gctttgggtt tgtttctgga ggttgcttgc aggtttttgg 120
aggaagtgac tagtttggtt aagagctggg aactgagtca ggtaagccgt gtcatgttgt 180

```

aactccacca	gaaaatggag	gagagcgggt	ttccaggaga	caaagctgag	atgagaagtg	240
tttataaaat	tatggatgtc	tccatTTGA	agctctgttG	gtgatggctG	gaggaggagg	300
aggcttgcTT	gcctactcct	tctcttttc	cagagggaaa	ccttgtggtg	gttcctcaCT	360
gtctattcat	tatgcaagga	aatgaggGCT	tttaaggGTT	cctcagattt	ttctccacca	420
aagagtgcTT	tcacaagtta	ttgaggcgtt	tgtttccatt	ttaaagtaaa	cttttggaaat	480
ttttttctc	cttttgcAGT	gacctgaagg	gttttgacct	ccttcaggaa	aggcaaggca	540
aaaacttaaa	acagttcaCT	gaggctcac	acaactttaa	gctgctccag	gttcctcgaa	600
agtcaccagg	aaatgtgatt	tcctcTTGT	gaagatggtg	atggccctaa	gctgagattt	660
ttttgagttc	tagggttgg	ttatcatcat	gttttgatgc	attgcaagac	tttattgtct	720
gatttgagtt	gatttctgca	aatataaaaa	ataataagaa	taatcctgca	agatctcaga	780
ggaactctaa	gactggctaa	caccagttc	tccaggttct	ccatttctct	tcaGGTcgtt	840
ccatttgtat	gttaggcctt	ctttcagttt	ctttgttcc	ccttccctt	tccgtcggt	900
aatttttct	gtgttctgaa	gtactctaa	gtcttcagaa	atatcagtat	gtcttcttaa	960
caatgtcgct	atggaaacaa	atTTTaaaaa	catgatgtca	gttgagaaaa	ccttatgtcc	1020
agttatctc	accttttaa	ttgggagggaa	tttattaatc	atgttaggaag	acattttgtg	1080
aggataattt	gaaaaaaagga	cccagtgcTA	ccctagtcA	cacacattga	tggagctct	1140
tcacatatta	gttttagaga	atgtacataa	ttgacccaag	caaagaacta	aatcccgaaa	1200
tgcttcagga	atTTTaaaaa	gccaa				1225

<210> 32
 <211> 844
 <212> DNA
 <213> Homo sapiens

<400> 32	tctgccatgg	tgacaattat	tttaaattta	gatgagatca	tcataacatg	acacataaaa	60
	atgtttcat	catgcataatc	aagtttgata	tgtagcttaa	atttattttg	cacacactag	120
	aatttgcct	ggtttctag	tacctcaagg	cagatatgca	aaggtgttta	ggagacatac	180
	tctcagacaa	accattatta	tttaaagga	tagaacaaaa	caatcgctag	ttaaggaaga	240
	tgtttgtaa	taattaaact	tgtaattatt	tgacttgaaa	tatTTAATCA	tttttttggg	300
	aaagaatgga	tagattttgt	taatgttagc	actctttaaa	ttaagcagtG	gctttttcc	360
	ccgtgtctcc	catattctcc	ttgtgtttga	aacataaaac	aaacactaaa	cctaagcaaa	420
	agttgctggg	tttgcTTCA	taattgaggt	gagttttcc	ctcaactatt	acaataaaag	480
	aaaactttt	atgatTTAA	tgataatgtt	ttgtgggg	ttaaagacct	cctaacaaca	540

gggggtttt atacaacaac aagaagttt taaataattg agttttaaa gtggaaagca	600
gcagtaaatt aaactagaag gatataattt atacctagaa ataaataaag ctcaacttgt	660
tttgcgttttgc tgttttaaa atatthaatc attaatttg tgcaagtata gagttctcct	720
atggcaaaac tataccatca tcttcctcaa ttgtgcattgg cagctgtact aagttctgca	780
aaaacaagac atatggatgt gtttcatacc ttctcagaat tggtatatca agacacattt	840
aaat	844

<210> 33
 <211> 2483
 <212> DNA
 <213> Homo sapiens

<400> 33	
gatctagaac tagtcatcgc gagcggcctt tttttttttt ttttttaaga tggagttcg	60
ctcttgcgtttgc ccaggttggc gtgcaatggc gcgatcttgg cttactgcaa cctctgcctt	120
gcagttcaag caattctact gcctcagcct ctcaagttagc tgggactata gacattcacc	180
accacaccca gctaattttt tttttttt gaaaattttt gatatttata aaaggtttca	240
ccatgttggc caggctggc ttgcactcct gacctcaggt gatccgccc cctcagcctc	300
ccaaagtgcgt gggattacag gcctgagcca ctgtgcccag ccctcaagta actcttaaac	360
ctactgaagt tagacaatca ataactgaaa tgacatcatc tttcttgaat gtttaaggaa	420
ataaaagttcc ttcttctgac aaactttaag tttttttttt gttttttttt gttttttttt	480
ctctgggagt tttctccct agctgctcac tttcattatc aacgaaatat tccttccac	540
gccttttac ttatcacca caacatgctc agttctctct cttaacaaga aaatataagt	600
tttcaccaac ctatttatca aatttacatc cccctccctt tctacttctt tttgtaaaaa	660
aagagcattt aacctattgt ctgtctccat gcccacat tatcagtgcgca agcaccgcgca	720
actgtggctc tccaccatgt gagctcaacc tatcatcaca actgtatctc ccctaaacact	780
catttagatt aagccatttt tcacaagttt ctaaaattat ctcttccatt tctcagtata	840
accctttctt tcccttcaca gtttcttggaa ccaatctcac tagtccttca acgttcaattt	900
ccaaaggccac cccgaacaca tctttccctc ttccctaaat aaattctact ggatttttc	960
tgtttttcac tggaaacttc tcatactcca ttgggttccctt tctcatgaca tttatattac	1020
atccctagta ttctggtttc ttacattttt tttccatctt actaaacaat aacttctttg	1080
agaactggac cagtgtctct tatatttata tccctaaataa tacttattaa acacgttagtc	1140
tattctcaac attgaattcc atcttataact caaagaataa tactttaaca tagccattgt	1200
tcatagtgta tatataatta agaacacattt ccatattttt cttgagatta tatagtgtta	1260

aattttcaa aattatagga tatgatctaa agatataattt taaaactcaa acctgtaatt	1320
ttatcttcag ttatgctata gcatgtacat ttccattctc ttgtcgaagt ttcttcgtt	1380
cctcagcttc tccttcatac ttccgtacgt attgtcttct aagccttcag agaacaaggc	1440
attctaatgt tatcaagggtt ctattcatct atatgttga ttggggtttt tatgagtaga	1500
gggggttcca cttcatgagt agttagatagac cagcaatcac tatacttgac actaaaccta	1560
aacctggcta taaaatatta ccaatttcta agggggattt tatgttgact gtatataaat	1620
ccatttccag agggcttata tttaaatgtg tcttgatata ccaattctga gaaggtatga	1680
aacacatcca tatgtcttgt tttgcagaa cttagtacag ctgccatgca caattggaga	1740
agatgatggt atagtttgc cataggagaa ctctatactt gcacaaatta aatgattaaa	1800
tatTTTaaa acaggcttac aaaacaagg tggcttttatttctagg tataaaatat	1860
atccttctag tttaatttac tgctgcttc cactttaaa actcaattat ttaaaaactt	1920
cttgggtttg tataaaaacc ccctgttggt aggaggctt taacccacca caaaacatta	1980
tcattttaaa cataaaaaagt ttcttttat tgtaatagtt gagggaaaaa ctcacctcaa	2040
ttatgaaaac aaaccacgca acttttgctt aggttttagt tttgttttat gttcaaaaca	2100
caaggagaat atgggagaca cggggaaaaa agccactgct taattttaag agtgcataaca	2160
ttaacaaaat ctatccattc ttccccaaa aaatgattaa atatttcaag tcaaataatt	2220
acaagtttaa ttattacaaa acatcttcct taactagcga ttgtttgtt ctatcctta	2280
aaataataat ggttgtctg agagtatgtc tcctaaacac ctggcatat ctgccttgag	2340
gtactagaaa accaggacaa attctagttgt gtgaaaaata aatttaagct acatataaaa	2400
cttgatatgc atgatgaaac aattttatgt tgcgtatgtt tgatgatctc atctaaattt	2460
aaaataatttgc tcaccatggc aga	2483

<210> 34
 <211> 591
 <212> DNA
 <213> Homo sapiens

<400> 34	
aatccattta aagtcaacta aatgttattt gggtaatatg tccctcatgt taaatttgcc	60
caaataataa tctcacctct taaaattcgt ttagttgaa attaaaatta gtattgtttt	120
tctgcattgtt ctccttaggtt gggtaaagaa gggaaacaagg gaatggggaa acgttagagat	180
tcctggacta acagagaaaag acagcttgag aataaaagta tgcaaaagat aatctacaac	240
aaaataatgc acttaactct tggtaactaaa caaataagct acccacattt cagcttatct	300
gtatttgttt catgatttgc cagctatcta gcaactatct tagtcactga ttccggaaacga	360

cttagcagtg	gttattgcat	agaacaactc	cttacacaga	gatttgcaag	ctttctgaac	420
tttcgtactt	tcaaattgaa	aatcaggaga	aacatttca	acggcttcat	attcagacca	480
agattagttat	atthaacaact	aataacaata	ttaaaagtta	gaacaattcc	tttcctctat	540
ctttctcagg	acaaactcga	gcttattaga	aaactaggga	gtgatctgg	g	591

<210> 35
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 35	ccttagggaga	atcagcaagg	aaaagatcaa	tgtaatcttg	aataacttat	cctgaaactt	60
ctccagagtt	acccagagag	tcaacagtca	tgctgctttt	tgtacttagt	ctgggtttc		120
agtaccagtt	taacacataa	aaagtgatca	aggtgcaagg	gacacagctt	tgaaatagtc		180
agacctggat	ctgaatctgt	gattctgtca	tctgcaataa	gtttctaact	tctccaagcc		240
ttagttttt	atctgtaaag	gggagtatta	actagagatg	aggattaaat	gaaaagtcac		300
ttactc							306

<210> 36
 <211> 617
 <212> DNA
 <213> Homo sapiens

<400> 36	ccaagactga	gttagatttt	ctattatgt	ctcccatggc	aacagcattt	tccacttaac	60
ttgttgaaa	agggacaact	gtcctctggg	ggctctgtt	ccaatattt	ttccactttc		120
tcttcattt	tcactttctt	cttacacatt	gcaatccaga	gtccagatgt	aaaacagtgt		180
agggccataa	gtgatggac	atctctaaca	aaattcttg	aggctgctgc	ctggaaactt		240
gtgtccttgg	gatggtaccc	ttaccctga	ggtgctaggg	atggggccca	gggtctttcc		300
ctgctttcta	ctttccta	atggctgtt	tttttttttt	tttttttttt	tttttttttt		360
gtacaagaat	tcagggatgc	aaggatgcct	tcctgcaaga	cagagatcat	tctatctaaa		420
ccaatgtttt	caggtttttt	actaggagca	catgcatgaa	tgtgtatata	tgtgtatagc		480
tatgcaaaaa	catgaacaga	tgtatgcatt	tgtataatct	aaaacacata	aaggtacata		540
tactgacata	ctgaaacaca	tattaatata	accaaaaata	aaaatttcat	gagacagtat		600
taatgtttac	cacatgc						617

<210> 37
 <211> 725
 <212> DNA
 <213> Homo sapiens

<400> 37		
ccaagactga gttagattt ctattatgt a cccatggc aacagcattt tccacttaac	60	
ttgttggaaa agggacaact gtcctctggg ggctctgtt ccaatattt tccactttc	120	
tcttcattt tcactttctt cttacactt gcaatccaga gtccagatgt aaaacagtgt	180	
aggccataa gtatggac atctctaaca aaattcttgg aggctgctgc ctgaaactt	240	
gtgtccttgg gatggatccc ttacccctga ggtgctaggg atgggccccca gggctttcc	300	
ctgctttcta ctttcataat ggctaagtga tgcagagga caacatctt atgtgttagag	360	
gtacaagaat tcaggatgc aaggatgcct tcctgcaaga cagagatcat tctatctaaa	420	
ccaattgttt tcaggtttt tactaggagc acatgcata atgtgtat atgtgtatag	480	
ctatgcaaaa acatgaacag atgtatgcata gtgtataatc taaaacacat aaaggtacat	540	
atactgacat actgaaacac atattaat aacccaaaata aaaatttcat gagacagtat	600	
taatgttaac cacatgctat atacttataat ttttcttca tttgcaaaag aatgctgtt	660	
tgactgtcta aacctctggc ttgagaaaaa aaaaaaaaaa aaaaagatct ttaattaagc	720	
gtgcc	725	
<210> 38		
<211> 90		
<212> DNA		
<213> Homo sapiens		
<400> 38		
gtaaaatatc tgtctactg gcaattttt ttacattgaa ttgttgaca atttttttac	60	
attgaatatg ttaaaatttt tatatattgg	90	
<210> 39		
<211> 222		
<212> DNA		
<213> Homo sapiens		
<400> 39		
tgttagagatg ggatctctt ttgttgcgg ggctggcttg gaattctctg ggttcaggtg	60	
atcctgctac gtcagccatg agccacggtg cccagcctgg caggcttgg ttctcttaat	120	
gcctctcctt ggcttgcaag atggccacct tctggctgtg tcctctctt catggcctt	180	
ccttgggg cacacatcct tttttcttcc ttcttcttat aa	222	
<210> 40		
<211> 257		
<212> DNA		
<213> Homo sapiens		
<400> 40		

gtttcccat tgactaacgc ttaagatata ttggagtcaa atgctcataa aatgctcatc	60
caatgcttat aaaatattag agttgaaatg gactctctgt tcatgcagat gatgagaccg	120
aaacagagag cttccaggag gatcaatgcc attcaatgag cttgctgctg tactcccctc	180
tacacaatat ggatatatcc catcccagcc cgagactggc catactagtt ctagtaactg	240
aggctttcct cctactt	257
<210> 41	
<211> 263	
<212> DNA	
<213> Homo sapiens	
<400> 41	
gctcgagggt ttcccattga ctaacgctta agatataattt gagtcaaatg ctcataaaat	60
gctcatcaat gcttataaaaa tattagagtt gaaatggact ctctgttcat gcagatgtat	120
agaccgaaac agagagcttc caggaggatc aatgccattc aatgagctt gctgttact	180
ccctctaca caatatggat atatcccattc ccagcccgag actggccata ctagttctag	240
taactgagggc tttcctccta ctt	263
<210> 42	
<211> 533	
<212> DNA	
<213> Homo sapiens	
<220>	
<221> misc_feature	
<222> (501)..(501)	
<223> n=a, c, g or t	
<220>	
<221> misc_feature	
<222> (514)..(514)	
<223> n=a, c, g or t	
<220>	
<221> misc_feature	
<222> (528)..(528)	
<223> n=a, c, g or t	
<400> 42	
atacagagtc gtgtggatt ggcagtctta aatcaactttt gttatccatgtggacatta	60
aaaaaaaaatc acagataagt acttaaaaca ctcaagattt gggatttttaga tcatgatttag	120
atacaataga aagatcctgg aatcccgaca tgaggacaaa aatggtactg aattttttt	180
aaaaaataga ttactgaaaaa gcgatctaat atagaacagt tgctttact tagatgttca	240
atgcataattt gttgtataat aaccaagtttta ttacagttca gataaagggt ccaaagtgtt	300

ttcgttatga tataatactt tctattgtaa actggactaa agaaacgttgc tatgttcaag	360
gaagtgttga gcagccatgg tgttcctggg acatgctccc caggtgctga gagaggtgct	420
gcaggagtca cagacctgca ggcacgcact tgccagtgac tggacgttgc gctggtggtt	480
ctcttttgtt gtgatttagag ntatgtgagt tgtntcaata cttgagantg tcg	533
<210> 43	
<211> 676	
<212> DNA	
<213> Homo sapiens	
<400> 43	
atacagagtc gtgttggatt ggcagtctta aatcaactttt gttatttcca gtggacatta	60
aaaaaaaaatc acagataagt actaaaaaca ctcaagattt gggattttaga tcatgattag	120
atacaataga aagatcctgg aatcccgaca tgaggacaaa aatggtactg aattctttt	180
gaaaaataga ttactgaaaa gcgatcta atagaacagt tgctttact tagatgttca	240
atgcataattt gttgtataat aaccaagtta ttacagttca gataaagggtt ccaaagtgtt	300
ttcggttatga tataatactt tctattgtaa actggactaa agaaacgttgc tatgttcaag	360
gaagtgttga gcagccatgg tgttcctggg acaggctccc caggtgctga gagaggtgct	420
gcaggagtca cagacctgca ggcacgcact tgccagtgac tggacgttgc gctggtggtt	480
ctcttttgtt gtgatttagag ctatgctgtt caggaagcat ggctggggag gcctcgaa	540
acttacaatc atggtaaaag gcaaaggaa agcaggtttgc tccataattt ctccggcct	600
ctctcaagcc ttcgagtggaa tgctgttca tatttcatttcc agcctggggag ttggagacct	660
gagctgcatt acctaa	676
<210> 44	
<211> 251	
<212> DNA	
<213> Homo sapiens	
<400> 44	
caggcctgct cagcaagatt ttcatggat tagtgaattt gttgttgc aatgccataa	60
taatgcacca tgcagtagac ttgctgtaaa gcacagtttc atcataacaa taactgtaaa	120
taatgctact gaacagctac agagcactcc tctgaactca ctggaaatggg ctatatccca	180
tggcaagatg agtaaggctc aagcgcaaaa atctcaccct tttttccctt tttttttggc	240
agaaatcccg a	251
<210> 45	
<211> 606	
<212> DNA	

<213> Homo sapiens

<400> 45		
agcgcccatg ggattaggga gagcatggcc ttcagaggct ggagctgttag tcctaactgc	60	
acagctggtc cagcagggcg taacgcacatct acctagagag taaaatgaca acagttgttc	120	
cctaagctca gcacttgcaa agaaatcttt tgggaagatc tcttcaaataatg tctagaactc	180	
tgcgcaaaca ataggttagga caagtgtgaa cctacccaac ctctgttgac aaatacagct	240	
gcacacccct cagcgaggcc tgctgtgaaa tgccaccttg gtgaaaatga gaataaaggg	300	
tgagtgagcc agctgctttt gnatgaccaa attaattctt agcctcccat taagacaggc	360	
ctgctcagca agattttcat gggatttagtg aattggtggt tgccaaatgc cataataatg	420	
caccatgcag tagacttgct gtaaagcaca gtttcatcat aacaataact gtaaataatg	480	
ctactgaaca agctacagag cactcctctg aactcactgg aatgggctat atcccatgca	540	
agatgagtaa gcctcaagcg caaaaatctc acccttggttt ccctttttt ttggcagaaa	600	
tcccgaa	606	

<210> 46

<211> 455

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (14)..(14)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (18)..(18)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (16)..(16)

<223> n=a, c, g or t

<400> 46

agaaaaggag agananangg agggagggag aaagaaaagaa ggtaaattga gacagcacta	60	
agtgcataatgg agagaattaa aggtgagcca tgtaatgtgg ctgaagaatt aggttaaattt	120	
gggtgttccc atggcctaag ggggtgacat ttaagttagg gttAACatgg agaggtgagc	180	
aggaagagag tttcaaatca tgtgagagct agtcccaatg ccgtaaaggag gaaatgggat	240	
tggtgtgttt gaggaactga ggaagggcag ctgggagttt ggtacatgaa aaagaccgtg	300	
acaaagaata agattggcatacatatgc agttccatct tctcacgtt gatgccaag	360	

taagaagttc ctaatttact gatagcaatg tgaacccaat gagaaacttt taaaagaaga	420
atgaagccat ctggtaagt atttaaaagt tcatt	455
<210> 47	
<211> 367	
<212> DNA	
<213> Homo sapiens	
<400> 47	
catctggtgg cttcttcgt gcaacacatt cttaccaaat gcccgtgca caccacgcat	60
gcactgtcct gagcgctagg aacagcagca accaggacgg gcagggctca gagcctcccc	120
tgtgtgccaa gaatacagac agcccaggca gagggcattc ggtgctccag acacaaagtg	180
aaggcccagc ttcaaattgt gctggatcca ggcacacatc ctgaggttct gctggtctgg	240
actgctaacc cactcagcag gatccattct caagcagccc cagcctgtct ccccacctgg	300
gcacgtcatg gctgggtct cttgatggc aaggctccat tgatcgagtc cccttggac	360
tggggca	367
<210> 48	
<211> 249	
<212> DNA	
<213> Homo sapiens	
<400> 48	
gttttattgt tttcatgcat tcttaggtct tctactgcat gtttcctaaa aacagggta	60
tcctgtctca gaccttcac tgaactcaaa ctgtgcttct cttgccagtc tcccgatgaa	120
gggcctgcca gggaaataaa cttgggttag aaaaaattct tgtaaataag ctcataagg	180
ggacagactc ctgctccatt cttcccaccc ctcacaaggt cttccaaatt agcggaaaac	240
agtctaaat	249
<210> 49	
<211> 436	
<212> DNA	
<213> Homo sapiens	
<400> 49	
aaaatgacct tctttgctg ttttcctgac cacaaggtagg attctgcccc tcagggcctc	60
cctttacctt ggcacacaag ggcctccatc ctggggcacc cttccacccctg ccccacccct	120
ccaaacctaac tacttgccat ttcccaaata catcgtgcag tgcctggtgt ctatcctgt	180
gttcatgctg cttectctgc ctgcaataatc cttccctgc aatagcctct tccacccagc	240
agacgcctcc tcactctctt ggctcagctc taagtcatat cccctaggaa agcttaccag	300
gatgctgcag tcagatggag tgtctccctcc tggggcccca cagaccctgt acttccttct	360

gtgacagcaa	caatcccaca	gcagtggAAC	tgcttacctg	cctgagctcc	tggagggcaa	420
ggatgccatg	ttgtctt					436
<210> 50						
<211> 853						
<212> DNA						
<213> Homo sapiens						
<400> 50						
cctggataat	aaatgcctaa	ctctcaccaa	ctaccttgcc	atcatggct	tcttcgatca	60
gaaatctagt	aagagagtat	ggtgggggct	gcgagaccca	tcatcaactac	caaaaaacat	120
gaagtctttt	cacttcaat	atgtgaagac	ctaaattatg	taattggatg	aatgatattt	180
gtagagtcaa	agagaatgtg	agttctccgt	cttatggta	tagttattat	gtaataatca	240
agtaatgtgg	tcttttattg	tcttaatctt	tcacaaacca	ttgctttcct	actccaatag	300
gaagcctgat	cagatactag	atagctctt	tatattgcca	atgtatggac	tgtgaaaact	360
gaggctcaga	gaggaagtaa	aataaagcat	ggctccccc	tactggtta	ctatattcca	420
aagttattaa	acacctggcc	agcactgctg	tgttaggtgt	acactgcaca	attgtgtccc	480
ttctaaggag	tcagtgttca	aatcacagac	atcagagatt	tattatgata	attttctgg	540
cagatggcag	taaagtagct	tattctaaca	aaattggaa	tataaagact	attttctaac	600
agatggaagt	agtttttga	agcaggtgag	cctttcctg	atgctcactc	aggtgctaga	660
tggactagca	gaaagaatgg	cgtcattgat	gtcccttgt	atgtgttacc	cagtttaatc	720
ctgggaaatt	ttacttttg	ctggaaaagg	agtcaccctc	ccttgccaac	cacatgtgt	780
gttatacatt	ggtattgcag	agtgatgcca	tttacaagta	atacattga	gttggcagat	840
ttcccaagggt	ttc					853
<210> 51						
<211> 383						
<212> DNA						
<213> Homo sapiens						
<400> 51						
tgaaaattga	ccaacaacca	gaagtgcacag	caacaacaaa	ataccaagtc	agtaaagatg	60
gagagaaaata	gggaagcagt	gaaggttagat	gtcatttctg	tttttagtgg	tggaaatacaa	120
ggtgttcttg	tgcttaaagg	tcatgttctt	gtgataaaac	gcactgcaga	gacaacatag	180
tttaattggc	tgaggcaggt	gactccctt	aagcatcagg	gtggaacaaa	ctacacgaca	240
aaatgttaatt	ttaaaaacca	ctctcattca	aatgtaaagaa	tatcaaagca	cccttaactc	300
attacatgag	tgaaacaatg	agtgtcatgg	tctgaattgt	gttcccctcc	ccaaacccgt	360

atgttcaagg cttaaaccct agt

383

<210> 52
 <211> 3342
 <212> DNA
 <213> Homo sapiens

<400> 52
 tgaaaattga ccaacaacca gaagtgacag caacaacaaa ataccaagtc agtaaagatg 60
 gagagaaaata gggagcagtg aaggttagatg tcatttctgt ttttagtggt ggaatacaga 120
 gtgttcttgt gcttaaaggt catgttcttg tgataaaaacg cactgcagag acaacatagt 180
 ttaattggct gaggcagtac ctactgcacg acccccccacg tccgcctcct gccattgcca 240
 gcaggtgcct tgcgcggta cctggctgcg cttattcattc cattatggtc gctctgtcac 300
 tggtgccatt atgtgctcac atgcccactc ctcaggttt agaagtcgcg ttgcccggca 360
 acagaacaat ctgctggctt agcctttggc caagttggca gctggacgag gacgctcaga 420
 gcccagctct tgagagttca agtatccgac agttcccccac tgctcccagg agcggttacc 480
 cgggcactct gtgcccctca ttcctgtttg ggccaaggcc gaggacctgc gagtaccaca 540
 gtaagccagt gctgtgtgct ccgagttcca gggcatcccc cagctcagcc actacactga 600
 gcacaaggac tctgtggggc ccaggagcag gtagtcaccc ctttggggtc cacaacaccc 660
 ggctgtcccc agacttgtgt ccagggaaaga tagtggtag ggcctcaag gagagcgggg 720
 cagggatgcc tgagcagcac aaggacccca gagtccaaga aaatcctgat gatcagagaa 780
 cggtccccga ggtcaccggg gatgcacggt ctgcatttg gcccctgcgg gacaatggag 840
 gcccctctcc ctttgtgccc aggccccggc ctctgcagac agacctccac gcccagagct 900
 cagaaatcag atataaccac acatcccaga catcctggac gagctcgagc accaaacgaa 960
 atgccatctc cagctcctac agtccacgg gaggcttgcc gggctaaag cagaggaggg 1020
 ggcctgcctc atcccgctgc cagctgaccc tcagttactc aaagacagtg agtgaggaca 1080
 ggcctcagggc tgtctttcg ggtcacacac ggtgtaaaa gggggcagat acatcaccag 1140
 ggcagacaat cgcccccaacg ggtggctccc ccagatccca tgactctagg cccctgagac 1200
 gcaagattcc cctgctgcca cgcaggcag gggagcctt gatgctgcca cctcccttag 1260
 agctggggta ccgggtcacg gctgaagacc tgcacctgga aaaagagacg gcattccagc 1320
 gcatcaacag tgcactgcac gttgaggaca aggccatccc ggactgcaga ccctcacggc 1380
 ctccccacac tttgtcctca cttgcaacag gggcttcggg tgggcctccc gtttctaaag 1440
 cacccactat ggatgcacag caggacagac ccaagtcaca agactgcctg ggcctagtgg 1500
 ccccccctagc atctgctgca gaggtccccg ctacagctcc cgtgtctggg aagaagcaca 1560

gaccaccagg accccctgttc tcctcctcag atccccttcc tgccaactct tcccactccc	1620
gggactcagc ccaggtcacc tcgatgattc ctgccccctt cacagctgca agcagggatg	1680
ccggcatgag aagaacaagg tcggctcctg cagctgccgc agcagccct ccccccctcca	1740
cattgaaccc cacgtcgggg tcgctactca atgcagtggta tggaggcccc tcacatttct	1800
tggcctcagc cacagctgca gcacgtgccc agaggtcaga agtgagatat aaccagagat	1860
cccaagaccc ccggaccaga tcctgcctca aacgaaatgc cagctccagc tcccacagct	1920
ctacggaagg cctccaggaa gtaaagcgga ggagggggcc agcctcatcc cactgccagc	1980
tggcccacag ttccctcaaacc acagtggatg aggacggacc tcaggctgtc tcttcgggtc	2040
accgctgtga aaacaaggca ggtacagcac cagggcagac acttgcccc aggggtggct	2100
ccccccagatc ccaggcctct aggccccaca tcaacactgc actgcacgtt gaggacaagg	2160
ccatctcgga ctgcagaccc tcacggcctt cccacactt gtcctcactt gcaacagggg	2220
cttcgggtgg gcctcccggtt tctaaagcac ccactatggta tgcacagcag gacagaccca	2280
agtcccaaga ctccctgggc ctactggccc ccctagcatc tgctgcagag gtccctcta	2340
cagctcccgt gtctggaaag aagcacagac caccaggacc cctgttctcc tcctcagatc	2400
cccttcctgc cacctcttac cactcccggg acacagcaca ggtcacctcg ctgattcctg	2460
ccacccctcac agctgcaagc agggatgccc gcatgagaag aacaaggctg gtcctgcag	2520
ctgccacagc agcccccctcc ccctccacat tgaacaacac gtcggggta ctactcaatg	2580
cagtggatgg aggcccctca catttcttgg cctcagccac agctgcagca cgtgccaga	2640
ggtcagaagt gagatataac cagagatccc agacccccc gaccagatcc tgctcaaacc	2700
gaaatgccag ctccagctcc agctcccaca gctctacggta aggcctccag gaagtaaagc	2760
ggaggagggg gccagcctca tcccactgcc agctggccc cagttcctca aacacagtga	2820
gtgaggacgg acctcaggct gtctcttgg gtcaccgctg tgaaaacaag gcaggtacag	2880
caccaggca gacactcgcc cccaggggtg gtcffffccag atcccaggcc tctaggcccc	2940
acatcaacag tgcactgcac gttgaggaca aggccatctc ggactgcaga ccctcacggc	3000
cttcccacac tttgtcctca cttgcaacag gggcttcggg tgggcctccc gtttctaaag	3060
cacccactat gcatgcacag caggacagac ccaagtcaca agactgcctg ggccctactgg	3120
ccccccctagc atctgctgca gaggtcttct ctacagctcc cgtgtctggg aagaagcaca	3180
gaccaccagg accccctgttc tcctcctcag atccccttcc tgccacccct tcccactccg	3240
gggactcagc ccaggacacc tcgctgattc ctgccccctt cacacctgca agcagggatg	3300
ccggcatcag aagaatgttt cgtgttcgaa attgtttgag gg	3342

<210> 53
 <211> 129
 <212> DNA
 <213> Homo sapiens

<400> 53
 agctgtcata cttatcgttg ctgcttatta gtattttat ggtttgttat ttcaaaagaa 60
 attcatttcc cataacaata ttatttctt aaatatgtta agctttaaaa taaaagcata 120
 tcaaatgga 129

<210> 54
 <211> 201
 <212> DNA
 <213> Homo sapiens

<400> 54
 catgccgtgg cccatgccca tttgcacagg gacgcagggg gttctcacac acaggcaggg 60
 tccgccccca gctgccgtcg gcgtcagtcc acacacatag gctttggc ggtgctggaa 120
 gcttctggcc cctgaacgtt ccccccaggc cccgttccca gggaaaggga taggcaggcg 180
 cacgctgcgg ccgttccac a 201

<210> 55
 <211> 227
 <212> DNA
 <213> Homo sapiens

<400> 55
 catgccgtgg cccatgccca tttgcacagg gacgcagggg gtctcacaca caggcaggg 60
 ccgcccccaag ctgccgtcg cgtcagtccca cacacatagg cttttggc ggtgctggaa 120
 cttctggccc ctgaacgttc ccccccagggcc ccgttccag gaaaggat aggcaggcgc 180
 acgctgcggc cgtttccaca atccgacctc gtagctgggg cgtgccg 227

<210> 56
 <211> 271
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (64)..(64)
 <223> n=a, c, g or t

<400> 56
 catctttta atattcagta tgaccgaata aagcactggt gctgccttag taacaatggt 60
 tgnctcaag gtaaacttct catgtgcttg tttcagttgt gagctcaatt agcctttc 120
 tcatgaaatg aatgccttt tacttgaag aatgactgag agccaggcta tggatattca 180

aacatgtatt	tttcagacac	ttcttgaaaa	taagtgaagc	aaacctgtta	attacaaggg	240
aagcaatgac	aatatttgtt	gccaatgata	a			271
<210> 57						
<211> 573						
<212> DNA						
<213> Homo sapiens						
<400> 57						
ggcagaagaca	gctgtggag	ttgttggttc	cagtatctt	ttcttcctt	ccggatggga	60
agagtgcata	tctcttggcc	cacaaatgtg	tttgcacact	aaggtgatgg	catcctttaga	120
aggaagcaga	gcagtgcct	gaccttcgct	tctggaaccg	agaaaatgat	gccatgctgc	180
tttggggtg	tgattgttgt	tggttttttg	tggatgaatt	ttaaaatagt	atttgtgact	240
atcatttcat	gtgtccactc	ttttaaaaaa	tgttacctt	tctaggattg	gcagaatttg	300
gaattatatg	tcttattaaa	tatgcttga	aagacagaag	taataagttc	tggtaatct	360
tttatagtgt	ttgtcttggg	agcaaatagt	atgagagaga	ggtgtgagaa	tgggataata	420
aatctaacat	atcaaaattha	gagaacccca	aaccatcaca	ttcttcctct	ttgtgccatt	480
ttagaattga	gaataccgtc	tttcttactg	tggtatattt	tttacttttg	tatataaact	540
tgtacgagaa	aataagattc	agtagcttaa	agg			573
<210> 58						
<211> 843						
<212> DNA						
<213> Homo sapiens						
<400> 58						
ggcagacag	ctgtggagt	tggtggttcc	agtatcttt	tcttccttcc	cgatggaa	60
gagtgcata	ctcttggccc	acaaatgtgt	ttgcacacta	aggtgatggc	atccttagaa	120
ggaagcagag	cagtgcctg	accttcgctt	ctggaaccga	gaaaatgatg	ccatgctgct	180
ttgttgggt	gattgttgtt	gtttttttgt	ggatgaattt	taaaatagta	tttgtgacta	240
tcatttcatg	tgtccactct	ttttaaaaat	gttacctttt	ctaggattgg	cagaatttg	300
aattatatgt	tttattaaat	atgctttgaa	agacagaagt	aataagttct	ggtaatctt	360
ttatagtgtt	tgtcttggg	gcaaatagt	tgagagagag	gtgtgagaat	gggataata	420
atctaacata	tcaaaattag	agaaccccaa	accatcacat	tcttccttct	tgtgccattt	480
tagaatttag	aataccgtcc	tttcttactgt	ggttatattt	ttacttttgt	atataaactt	540
gtacgagaaa	ataagattca	gtacgctaaa	ggggccaggc	actgtggctc	atgcccgtaa	600
tcccagtgg	ttagaaggct	gaggggaagg	atcacttgag	gcctggagtt	tgaatcaac	660
ctgggcaaca	tagcaagact	ctgttccttc	aaaaaaaaat	ttttaaaaat	tagctgagca	720

tggaggtgca	tgcctataat	cctagcaatg	attataccat	tacactccag	cctggatgat	780
agagtgacac	cctgtctcaa	agagaaaaaaaa	aaaaaaaaaa	aattctgcgg	cgcaagaatt	840
cgc						843
<210> 59						
<211> 221						
<212> DNA						
<213> Homo sapiens						
<400> 59						
cgggactgga	agggtgtgcc	ctcgccgtcc	tcgccttcgt	cttgcacggg	acaagatgtc	60
acgattccga	atccaaacct	cagagacagc	ccccatccct	ctcgtaggcc	accacacac	120
cccgctcagc	aacaataaca	acctgcattt	agggAACGTG	tgttatgtgc	caggccacac	180
aggcattatac	tcatgtactc	ctcacaggca	ccttatcaag	g		221
<210> 60						
<211> 535						
<212> DNA						
<213> Homo sapiens						
<400> 60						
gcacgtgggg	tcgggggtggg	ggcgaagggc	cgcttggcct	ctgtagggtc	gggactggaa	60
gggtgtgccc	tcgcccgtcct	cgccattcgtc	ttgcacggga	caagatgtca	cgattccgaa	120
tccaaacctc	agagacagcc	cccatccctc	tcgttagcca	cccacacacc	ccgctcagca	180
acaataacaa	cctgcattta	gggaacgtgt	gttatgtgcc	aggccacaca	ggcattatct	240
catgtactcc	tcacaggcac	tttatcaagg	agatgtgtt	gttacctgca	ttttacagat	300
ggggaaactg	aggctcaatg	cattaaggac	tgccaggaag	ccctgtcctg	tggctgtgat	360
gatggaaatg	ttccctgtgt	tgttcagtat	ggtagtcact	ggccacaagt	gagcactgga	420
aatgtgccta	ttgagactga	ggaactgatt	ttttcatttt	gtttaattgt	aattaaacag	480
ttacgtgtgg	ctgtggattt	ggaaaaaaaa	aaaacaaaaa	aaaaaaaaaa	aactc	535
<210> 61						
<211> 514						
<212> DNA						
<213> Homo sapiens						
<400> 61						
cgtctcaactg	atatcccctt	cagttctccc	aaatcacccct	ttctgaaaca	tacatccgat	60
catgtcattc	ctttgcaaaa	ctaagtttcc	ctttgcactc	aaaacaatat	ctgaatgtct	120
tgctctggtt	tctcaggccc	cgcctctacc	actggcctca	gctctcccc	tctctccatt	180
gctcaactgaa	taacagccac	caagacctcc	ttgcattgc	tcaaacatgc	aaggcctaca	240

cctgccacag ggccttggca catgttattc catctgttta caatgcttgt ctccacatgg	300
ctacttcttt gtagcagttg gtctcagctc aatgtcatg tccccaaacca gcctacctaa	360
agcagttctc cctacctagg ctttcttgc tcaccatgta aaagattcct atttagtttc	420
tgttattatc cttcttgctc tagaatggaa gcctacgag ggcaagatat ttttctgtat	480
cggtcactgc tatacgctca acaccaagaa catg	514
<210> 62	
<211> 598	
<212> DNA	
<213> Homo sapiens	
<400> 62	
tttcttctgg tcttatttcct ctggatctaa atatatcaac attgacatgt gaggtcagaa	60
ttttatcatt tgaaaaattt tttcacttt actgaaaatt cagtcacttc ttccgtgaaga	120
aggaagcaat tgcataatcaa ttttcttcta ttccagctta atctatttat ttttctttt	180
tacattaaaa cattcttta atgatatacg ctgcctgtaa atattccca cccactttcc	240
agaggtaatc cactgttatac aagtaagttt agtaaatttt ttttaattga attttctcaa	300
taggtcatta acgtgtttca aagttgaaaa attacaaaac tatgtgtcgt gaaaagtctc	360
cttctttccc ttgtgtccca agctacctag ttcttggagc cagttgatgt tatcagattc	420
tttggtattc tttcagacac acatggatcg cattattga gcaaaggggc gtgggtgtgt	480
gtccctctgt ttttaagttc taaatgttag catgctacac atacttttt catatatttt	540
cttaagtaac ttcatttcata tatacgatccactttgtaa aaatttagata ctacatgc	598
<210> 63	
<211> 648	
<212> DNA	
<213> Homo sapiens	
<400> 63	
tgaatttctt ctgggtcttat tcctctggat ctaaatatatac caacattgac atgtgaggtc	60
agaattttat catttggaaaa attttttca ctttactgaa aattcagtca cttcttcctg	120
aagaaggaag caattgcata tcaattttct tctattccag cttaatctat ttattttct	180
cttttacatt aaaacattct tttaatgata tatgctgcct gtaaatattt cccacccact	240
ttccagaggt aatccactgt tatcaagttaa gtttagtaaa tttttttaa ttgaattttc	300
tcaataggtc attaacgtgt ttcaaaagttg aaaaattaca aaactatgtg tcgtgaaaag	360
tctccttctt tcccttgtgt cccaaagctac ctagttcttg gagccagttg atgttatcag	420
attttttgtt attcttcag acacacatgg tatgcatttt tgagcaaagg ggcgtgggtg	480

tgtgtccctc	tgttttaag	ttctaaatgt	tagcatgcta	cacatactt	tttcataatat	540	
tttcttaagt	aactttat	ttt	cattatgt	attcagttt	gtaaaattag	ataactacatg	600
catgtggttc	aaaagtaaaa	tgtatgtaaag	gctaataata	tgtaatag		648	

<210> 64
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 64	gaggttaagcc	catttcacc	ctacaggcag	ggtagggagg	ggcacattct	gagaagtgg	60
tatcacaagt	tgtccctcat	gtggatccca	tgacttgagt	agtggaaac	tccaaagctga		120
tttgaagatt	ctttat	ttga	gagtggac	ct	gcacac	tg	180
ggcgagcaga	tcattgaagg	actgcac	tt	tatc	cc	tcac	240
attatcaaac	gaaagagaat	agtccat	tg	aaac	atc	cc	300
gcactgaatg	aggaccagca	ggaagagatc	tc	aaaaca	taagataatg	gactt	360
catagattt	aaaggcctt	ctcaaactaa	ataggcaaga	ttgaaaatac	ctatgaggaa		420
gaggaaacta	tacaatgacc	tagcaaattt	gaaaaaggaa	ccaggaacaa	ctt	tg	480
tgaaaagttc	atgtctt	at	aaaaatc	taacagatgg	at	ttactagc	540
aaactgaaga	gagtgaatga	cctggaa	agagaaga	aaatataatt	ta	gagaacca	600
c							601

<210> 65
 <211> 1216
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (58)..(125)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (1204)..(1204)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (1206)..(1206)
 <223> n=a, c, g or t

<400> 65	tctcctgatc	ttggacatca	gaactcctga	ttctcaagcc	tttgggtttg	gactggan	60
----------	------------	------------	------------	------------	------------	----------	----

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 1200
nnnnntaact ctaatacacc agtacaatgg aaagattcct aaattcaaaa gccagaaggc 1800
tgggttcctg ttcccacccct gcctttacc ttctgtgtgt tcctgatgaa gacacttcat 2400
gctccactat ttacttacct ctgaaacgaa gggctgaccc agatcagttg ttctctgacc 3000
tgcttggagg gactcagagg ctgtggagag tgaatatttc catcagctga tgcccttctc 3600
aggcctcaat ctccccctggt ttgcagactg tggccctcct tggcctctgt ggaatctggc 4200
catttgaatc ctgtcagccc tgtttccat caccaaagga ctccggagga actgtgccaa 4800
gcaggctgtc agccacgggc aagcttctg aaaaagacgt gccaactgca gccacagaaa 5400
gtccattccc ttgaataact ctgctaataat ttgaaaattha gttcccttgc tcctgatcat 6000
gctactgggt atttggatata aagagccaag gatgagggca atagaaaatt aaaatcatgt 6600
tctactcata taaactgcac agatatggaa gggtaggtcc tattacctat aatcctggga 7200
tttttagact ctcactttca ttggaccaga gttgccttag ggacagtaaa aacacaaaat 7800
gctgggtatt gtttcatca agcaactact gatagtgcac atttaaatca aaattcttct 8400
aatcccaaac tcagtaaaca gatgctgtga gcttagttct gcccctctgg cttcagattt 9000
taccccaactg gatgtgcccc attctgagat gacaagacgc ttccagcttc cacatggttg 9600
caatttggct gtggaactgg catgaaagca cgtcactgtg tcagcacctg ggccaccaga 10200
tgaataacct atgaacaaca gctttggact aaaatatgaa ggggttgttt tccttcaatc 10800
tccccctacc ttccctcagaa cctgctacaa ggaaagattt atagactcga aagcgtcaat 11400
gactgatttag acccatatga ttgctcctgc tgtttctgat atttaaaaaa attgtcttat 12000
aaangnataa aaataa 12160

```
<210> 66
<211> 1430
<212> DNA
<213> Homo sapiens
```

```
<400> 66
gctcaccaat gtgggtgggc ctcattcaat ccattgcaga cttgaataga actaaaagga 60
agaggaaggg caaatttgtt ggctgcttga gctgggatat tcatcttct cctgatcttg 120
gacatcagaa ctccgttattc tcaaggcttt gggtttggac tggaggcacc agcttcctg 180
ggcctccagc ttgcagatgg catatcatgg aacttctcag cctccaaatt cataactcta 240
atacaccagt acaatggaaa gattcctaaa ttcaaaagcc agaaggctgg gttcctgttc 300
ccaccctgcc ttttaccttc tgtgtgttcc tggatgaagac actttcatgtct ccactatattt 360
cttacacctg aaacgaaggg ctgaccaga tcaagttgttc tctgacactgc ttggagggac 420
```

tcagaggctg tggagagtga atattccat cagctgatgc ccttctcagg cctcaatctc	480
ccctggtttg cagactgtgg ccctccttgg cctctgtgga atctggccat ttgaatcctg	540
tcagccctgt tttccatcac caaaggactc cgaggaact gtgccaagca ggctgtcagc	600
cacgggcaag ctttctgaaa aagacgtgcc aactgcagcc acagaaaatgc cattcccttg	660
aataactctg ctaatatttg aaaatttagtt cccttgctcc tgatcatgct actgggtatt	720
tgatataag agccaaggat gagggcaata gaaaattaaa atcatgtct actcatataa	780
actgcacaga tatggaaggg taggtcctat tacctataat cctgggattt ttagactctc	840
actttcattg gaccagagtt gccttaggga cagtaaaaac acaaaaatgtc gggattgtt	900
ttcatcaagc aactactgat agtgcacatt taaatcaaaa ttcttctaatt cccaaactca	960
gtaaacagat gctgtgagct tagttctgcc cctctggctt cagattttac cccactggat	1020
gtgccaatt ctgagatgac aagacgcttc cagttccac atggttgcaa tttggctgt	1080
gaactggcat gaaagcacgt cactgtgtca gcacctggc caccagatga ataacctatg	1140
aacaacagct ttggactaaa atatgaaggg gttgtttcc ttcaatctcc ccctaccttc	1200
ctcagaacct gctacaagga aagattata gactcgaaag cgtcaatgac tgattagacc	1260
catatgattt ctcctgctgt ttctgatatt ttaaaaaatt gtctcataaaa gagataaaaa	1320
taaataatca atggcaaact tctggcatgg gagagacatt tagggaaaga agtcatctca	1380
gcctccccca acacacacat gcacacacac atacagctgc aaacacaatt	1430

<210> 67
 <211> 430
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (72)..(139)
 <223> n=a, c, g or t

<400> 67	
ggatattca tctttctcct gatctggac atcagaactc ctgattctca agcctttggg	60
tttggcctgg annnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn	120
nnnnnnnnnn nnnnnnnnnnt aactctaata caccagtaca atggacagat tcctaaattc	180
taaagccaga aggctgggtt cctgttccca ccctgccttt taccttctgt gtgttcctga	240
tgaagacact tcatgctcca ctatgtactt acctctgaaa cgaaggcgtg acccagatca	300
gttgttctct gacctgcttg gagggactca gaggtctgtgg agactgtggc cctccttggc	360
cctctgtggaa tctggccttt gaatcctgtc agccctgttc tccatcacca aaggaaatccg	420

gaggaactgt	430
<210> 68	
<211> 829	
<212> DNA	
<213> Homo sapiens	
<220>	
<221> misc_feature	
<222> (240)..(354)	
<223> n=a, c, g or t	
<400> 68	
gtatgtacta cccacataag tgggacactt tgaacaatga aatatacatg ttttcaccaa	60
agaagggagt cttattttt tccgacttca gacaattcat cttcatccat taattttcc	120
ttttgtaat atgtacctt atgctaattt ttaatatgca aataacttac aaatataatgc	180
tcagcatttg agtacaggct gtgctttatt acatattaca tgcatgtatg caatgtactn	240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn	300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnacaaaa	360
taaaatttgg aatgaagcag gaattatctt ggactattta taatttatta agatactaaa	420
taccgtcatt atgaaatggt ctcattaagt gatccctgtc taaagagttg cataatagt	480
agacaataag gggcttagt tattttttt ctttgaaca taagctattt tacatttgc	540
ccaacaggac ttctttagt agtctcattt tcctattaca atattattt tgttattaag	600
tgaaacacct catatcacca ccactgctga gccagatata atagactgta ctgtgttaagg	660
ttcttaaaac tcacatctat aataaccaga cctctttttt tatattgatt caaattatgt	720
ttaatgctga attataagca aaacctacaa gaataaaatc atttatgct ttgaaactga	780
ctcctttttt aaaaaaagaa tgatcacaac taccactcc ctcatctat	829
<210> 69	
<211> 541	
<212> DNA	
<213> Homo sapiens	
<400> 69	
atagactagt aaagtctgtt tttatataaa agtgacacag gaagctgtt caatctagga	60
atgggcaggt atggtcagtg gttgtcaca tagagccacc caaggagaca tctttctcc	120
agatcctaac agagtgcattt ttgtgtttt cctaacagac ctgtcgact ggcttttct	180
cttttaagga tatagagaaa gcaaaattag caaatctagt ttcttgcac tttactagga	240
gggagggaaaa gagagaaaaga atgcacttgg gaatgggagg ctttgctttt aatttaccag	300

atgccagtta gagcgttaat gccacacgag ccagagaggt cacctgctg agcatggctt	360
gactgttgca gcctcttct gcgactccag acatgcgtg tctgttagct gattctagcc	420
ttcagatgca gcccggagat gtaaccctga ggctggagtc ctgtggctct aatcccagac	480
agaggcaact ccaccaagtt ctggtttggg tcagaaatag agggaaagga tgaatgaaag	540
a	541

<210> 70
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 70	
atagactagt aaagtctgtt tttatataaa agtgacacag gaagctgtta caatctagga	60
atgggcaggt atggtcagtg gttgtcaca taggccacc caaggagaca tctcttctcc	120
agatcctaac agagtgcattt ttgtgcttt cctaacagac ctgtcgact ggcttttct	180
cttttaagga tatagagaaa gcaaaattag caaatctagt ttcttgcac tttactagga	240
gggaggaaaa gagagaaaaga atgcacttgg gaatgggagg cttgctttt aatttaccag	300
atgccagtta gagcgttaat gccacacgag ccagagaggt cacctgctg agcatggctt	360
gactgttgca gcctcttct gcgactccag acatgcgtg tctgttagct gattctagcc	420
ttcagatgca gcccggagat gtaaccctga ggctggagtc ctgtggctct aatcccagac	480
agaggcaact ccaccaagtt ctggtttggg tcagaaatag agggaaagga tgaatgaaag	540
aagataaaaa gaaataatga acaagtgagt tctttcagct gcttacttgg gtggctgca	600
ggcagcaaga gacaggaagg aggctgtgtt ggggtccttgc ttcgaggcag tggagattt	660
gctcagaggg gttgtgtggg aagtgagaga aggggt	696

<210> 71
 <211> 1207
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (957)..(957)
 <223> n=a, c, g or t

<400> 71	
gcagtgccag gacctctccc ggaggcgaaaa cagagcagca gcttctcgcc cctgtgccga	60
gcccaggcct gcacccctaa ggcaggcact gctccgtat ccaggaacca cctctctcta	120
cagctggag tgagcagtca gagagggaga cagccttgcc cggtgctacc cagcaagcta	180
gtcaccgagt gggcagaggg aggagcggcc ctcacccggat gtcaaggcagc ctgggtcccc	240

agtccagctc	tgccctgtccc	tcgcaataac	gcctcagtga	cgaccatttg	tgagccatct	300
ctctgtctca	ggcacgggtgc	tacatgccaa	cgaaacctgc	tcccattgaa	ccctggccag	360
ccagtgaaga	aagggttggg	cctggggaggt	gccactttac	agacaggggc	accaaggggc	420
agggtggcag	gaggcccacc	ggacgttccc	catgaagtag	cagtcccagc	atccacaccc	480
agcaggcacc	acgctggccc	gcagcctccc	tgccagcacg	cctggcttcc	cggcctcgga	540
acttgatctg	ctccctcttc	cggacactgg	ggctcctgcc	aagtccctggg	ctgggcagca	600
actgctgaac	attctaagaa	atccctccca	gggttttctc	aggagcccg	gtggggcagg	660
aagtccccag	gggctgaggg	gaccgtggcg	gcaggtggca	cccagagcag	cactctcctg	720
gggcccaggg	tgttgggcca	gaggcaggac	tgtgaggcct	agtgttagggc	ctcctgccag	780
tggccggcac	ctacttgtgg	ggctgggggt	tccccagca	ggttgggctc	cccacctgac	840
acactcacag	actttgtgcc	ttggagagcc	agtgttcccg	gggccacata	gctatgccgc	900
ccaggggctg	ggcctgtccc	agctctggtc	cccccggcccc	aggtcctgga	cgctggntcc	960
gcgcagcagc	aggcggcctc	cgaggacac	gatgtgactg	gctgccgcta	cgtcgcaactc	1020
agatgagtct	gcgcggatc	gacctgctgc	cgagtcctgc	cgacaggca	caggcaggga	1080
gtaaaaattta	tctaccctt	tttatttctt	aataactgaa	tgaaaataaa	cattggtggt	1140
ttgacaaata	actacatatt	ttcaaaccca	gccagtccag	gggatgcagt	ttccaggtgc	1200
gttatgc						1207

<210> 72
 <211> 263
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (231)..(231)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (239)..(239)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (242)..(242)
 <223> n=a, c, g or t

<220>
 <221> misc_feature

```
<222>  (248)..(248)
<223>  n=a, c, g or t

<220>
<221>  misc_feature
<222>  (259)..(259)
<223>  n=a, c, g or t

<400>  72
gtcctacttc aataatttaa aaaaatattc tgggatttgc attcctcaaa ttccagccct 60
cattttactt tacctgtcta cagtgttttgc cgcaatttgc cactccttcc tttttgaagt
attttcttcc ctgggtttct gaaataactgt tatcttccta tctcaactggc catacattct 120
agtctccctt gctagtttat tatgggttttc atcttctcaa caacaatttt ntttttttng 180
gnggagangg agtcttgcna tgt 240
263

<210>  73
<211>  579
<212>  DNA
<213>  Homo sapiens

<220>
<221>  misc_feature
<222>  (547)..(547)
<223>  n=a, c, g or t

<220>
<221>  misc_feature
<222>  (555)..(555)
<223>  n=a, c, g or t

<220>
<221>  misc_feature
<222>  (558)..(558)
<223>  n=a, c, g or t

<220>
<221>  misc_feature
<222>  (564)..(564)
<223>  n=a, c, g or t

<220>
<221>  misc_feature
<222>  (575)..(575)
<223>  n=a, c, g or t

<400>  73
tgggtttga gtcctaaaaa ttgtataccca gtgctaatttggatataccca aactttttgt 60
ctcttagtaa ttagttttgt tttgtttgt tttgttttaa tggtgtgtt atcttaaggt 120
```

gtaaatgcag acaaagttgg aattgaagct gccgaaatgc tattagcaaa tcttagacat	180
ggtgttactg tggatgagta tctgcaagac caggtaatga cacattdagg ttaaaaaccc	240
tctaacctgt tagatttcaa tatgtggtag attgaatatc aatttaaata attgactttc	300
agacactaat tagcaagtcc tacttcaata attaaaaaaa atattctggg atttgcattc	360
ctcaaatttc agccctcatt ttactttacc tgtctacagt gttttgcgc aattgaccact	420
ccttcctttt tgaagtattt tctttcttg gtttctgaaa tactgttatac ttccatctc	480
actggccata cattctagtc tcctttgcta gtttattatg gttttcatct tctcaacaac	540
aattttnttt ttttnggngg aganggagtc ttgcnatgt	579
<210> 74	
<211> 339	
<212> DNA	
<213> Homo sapiens	
<400> 74	
ctctgttctt tgctcatctt catgggtatt gggggtagat cagatgagtg tgtaaaagcc	60
ccttggaaagc tggaaagagc ttaacaaata tcagctgtt ccatgaaaga atatttgctt	120
actttccatt gtgtataaga taacgataat catagaatta atattattca acttccttgc	180
gtctttgca catttctgta cagtcctgtt tttgtttgtt actgtcattc tcaaagtact	240
caagttgaat tttgtcactt tggatttctt ccaggaatat gtgagagaca ttttaggtctc	300
taatgtatgaa gtattttcta ggcgtaatgc aaaagattg	339
<210> 75	
<211> 299	
<212> DNA	
<213> Homo sapiens	
<400> 75	
caacgacaga taacttcgtg atggaaaatg taggtctct tagtagttag ccctctgcca	60
ggtgacttcg tttccacctc cccttatata ttgttcttcc ttccctctca aattctctaa	120
atctctgctt atacagagca atctggctct ctctggcttc tccagtcata atacatcata	180
ctcacattca ccatcttgag aagtgcagta agccacataa atgcagcaga agtacctt	240
gcagtcctag gaggctgtgg ttttgagttt ctttttttt tcttttgga gacggagcc	299
<210> 76	
<211> 247	
<212> DNA	
<213> Homo sapiens	
<220>	
<221> misc_feature	

<222> (174)..(174)
<223> n=a, c, g or t

<400> 76
tgtatattga gtcctactg tgtggcaagg cctatggtaa gcattttatt ttggtaactt 60
gtttaatcct cattacaatt ctgtggtaaa tgctattatc tgttttata ttgaaggat 120
gaaatggagg ctcagagggta tatgttagtag ctaaatgtta gagctaggat tganacccaa 180
attgacttct gagtatacat ttccccccaa ctgtatgata cttcatattt ggagtcagct 240
tgaagta 247

<210> 77
<211> 254
<212> DNA
<213> Homo sapiens

<400> 77
tgtatatttg agtcctact gtgtggcaag gcctatggta agcattttat tttggtaact 60
tggtaatcc tcattacaat tctgtggtaa atgctattat ctgttttat attgaaggat 120
tggaaatggag gtcagaggg atatgttagta gctaaatgtt agagctagga ttgaaacccaa 180
aattgacttc tgagtataga tttccccca actgtatgat acttcataattt tggagtcagc 240
ttgaagtaat tcac 254

<210> 78
<211> 504
<212> DNA
<213> Homo sapiens

<400> 78
tgatttgatt tggttttaaa atagaatagt tgtactctga gggaggaggg aaatgcttaa 60
acaataactaa gaattccatt cttagagac aaattactta gaagttgata gtgacatatt 120
gaaagggttg ttgattgtt gattattcag gtgatgaaga tggatggtagg ggccatggcg 180
gctgagggag aatgagtctt aaacactgag gaggcacaaa agattgggtg gctggatata 240
ataggaaact ggaacgaaag aaggagaaga gaatggcgat actgataaaa aatagaatga 300
aagaagatgt gtggaaaaga aagtttcaact ttgaaggctt gatggatggcag 360
atatagatat acatccaata gatgagtggg aaaagtaaat caaacagaaaa tgaaaaattt 420
agtccaagat tggatggaga ctaataatgg ggaggactga gcctggggc aactacatta 480
gtaacagtgg caggtttgt tttt 504

<210> 79
<211> 210
<212> DNA

```

<213> Homo sapiens

<220>
<221> misc_feature
<222> (80)..(99)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (173)..(173)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (175)..(175)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (206)..(206)
<223> n=a, c, g or t

<400> 79
gtccctctag agaacccctga ctaatacagg tggttcctgg ctcatggcag tgtgactcca      60
gtctttacat ggcgttcccn nnnnnnnnnn nnnnnnnnnnc aaatttcctc ttttcataag      120
gaccgtggta ttggataggg gtccacccta cttcgatatg accttatttt aantncatct      180
ttgatgaccc tggccacg taaggncaca                                         210

<210> 80
<211> 161
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (116)..(116)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (148)..(148)
<223> n=a, c, g or t

<400> 80
gagggtcaga agcagaaaaga tgacatcata agaaagactc aactggccat ttttggcttt      60
gaagggtgaa aggggacctg agtccaggca tgtgggcagc ctggagaagg cgaganaatg      120
gattcttccc cagaatccct ggaaagggnac gtggccctaa c                                         161

```

```

<210> 81
<211> 112
<212> DNA
<213> Homo sapiens

<400> 81
tagcacctt taataactct ttttagagta attagagca aactagataa attttaat 60
atatctcatt gcatactttt atgtaacttt gtcttagaaa aacaagagtt ct 112

<210> 82
<211> 277
<212> DNA
<213> Homo sapiens

<400> 82
tgaatgatg acaccagtag aatatggtga gatatgtata cacaatgtaa tacctagat 60
gacaatttaa aaacctatac aaagagtgc acataaataa acaaaaacaa cataaaaata 120
aaaatataat tctaaaaata ttcaagtagc caattggaag gtggaaaaaa gaaaaagaac 180
aaaaaataga acagcactaa acaaaaaata aaatcgaga cctaggccct gacatatcaa 240
taattatatt aacatgtaaa tggtctaaat tttacca 277

<210> 83
<211> 637
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)..(7)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (92)..(196)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (232)..(316)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (367)..(427)
<223> n=a, c, g or t

<400> 83
gtccttnggt gttgcaccaa acaggctaag aagcaatgac attgattatg aggaacttgg 60
aactcagatg tattaatttc ctattgtgtc tnnnnnnnnnn nnnnnnnnnnnnnnnnnnn 120

```

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn	180
nnnnnnnnnn nnnnnncact ttctttctgt aggctctagg agagaatcta gnnnnnnnnn	240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn	300
nnnnnnnnnn nnnnnnccaa gtccttctca cactgctgtc ttttgggtc tctctttgc	360
ctgcctnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn	420
nnnnnnncat agttgattag cagccttaat ccatctgtaa ttttaattcc cttttgccag	480
gtaatgtggc cattatcttg cctacaacct cagaggatgt tgataatgta aaggtagtg	540
aattggggag ttcatagggt ttgatagttg acaaatacag agttagttagt tagtagggg	600
tttttggca gggtgcagtg gcccataacct gtaatgt	637
<210> 84	
<211> 577	
<212> DNA	
<213> Homo sapiens	
<400> 84	
cagggcataag ccaccacacc tagccaagaa accattctt gaacacaagc aaatatactt	60
tggagaaaaa tttataataatc ctggcagggc tacattcaac ataattctgt tatggggaa	120
ggcagcatgc tttggctgct cagtgagcta tgttctgtac aaccaagtga aattgctaaa	180
aaaagattct cctgtataaca gtaacttaaa gtgtatgcagt ctacttaaga tcagatctga	240
gttacaaaat caaaagtgac agctcctatg ttctttaaa gtccaatctc ttttttcat	300
tgttgtgctc caaatgcctt gagtacctga tgttagtagtag gtggctaata aatattggtt	360
gaatttcttg aacgaatctg ttatgaaaag atctactttg ctcatctctg tgccccata	420
gcaggagctt gaggagaagg agaaaatatt gggtcagagc ttttgattaa tatgtatgtat	480
tctattaaac gggttcacta aaccaaaaaa ggcaaggaaa acagttaaac caagagtctt	540
gaggttcaag tcttgtatg attaaatcat catccta	577
<210> 85	
<211> 687	
<212> DNA	
<213> Homo sapiens	
<400> 85	
ttcccatgtt agccagggct ggtcttgac tctgaacctc agggtatcac ccccccttgg	60
gctcagggct catggctgat attacaggca taagccacca cacctagcca agaaaccatt	120
cttgaacac aagcaaataat actttggaga aaaatttaat aatcctggca gggctacatt	180
caacataatt ctgttatggg ggaaggcagc atgctttggc tgctcagtgta gctatgttct	240

gtacaaccaa	gtgaaattgc	taaaaaaaga	ttctcctgta	tacagtaact	taaagtgatg	300
cagtctactt	aagatcagat	ctgagttaca	aatcaaaag	tgacagctcc	tatgttcttt	360
taaagtccaa	tctcttttt	tcattgtgt	gctccaaatg	ccttgagtagc	ctgatgtaga	420
gtaggtggct	aataaatatt	ggttgaattt	cttgaacgaa	tctgttatga	aaagatctac	480
tttgctcatc	tctgtcccc	aatagcagga	gcttgaggag	aaggagaaaa	tattgggtca	540
gagctttga	ttaatatgta	tgattctatt	aaacgggttc	actaaaccaa	aaaaggcaaa	600
ggaaaacagt	taaaccaga	gttcttgagg	ttaaagtctt	gtgatgatta	aaatcatcat	660
cctaagatga	tgatgacata	aactttc				687

<210> 86
 <211> 77
 <212> DNA
 <213> Homo sapiens

<400> 86	tgtcgaaaa	caactgtcgt	gactggtgaa	aaccctgtgc	gttaccctaa	cttaatctgc	60
	cttgcatgca	catcccc					77

<210> 87
 <211> 575
 <212> DNA
 <213> Homo sapiens

<400> 87	cacacacgtg	cacacacaat	actcacttaa	caaacattt	atttattgaa	catttattat	60
	atgccaaagc	tggtataaga	cacaaaaga	gtaagacaga	aagtattctt	ccctggagct	120
	ttgtctgact	ttccaagctt	tattaggcat	caaacaaaac	tgaagtgcctt	tttaagattc	180
	aagtctccta	cgtcgctaa	ggcagagtaa	gtagcctca	gtactatatt	ttactctaatt	240
	tttttttaa	cacaatggca	gtactataag	tatgaaactt	tggtataaat	gtcagattct	300
	agattgtgct	cctgctttct	gcacactcta	atattttaa	acatctcgaa	aatacagagt	360
	ggcagcaaaa	ttacctgtaa	aaacatacta	gctcaagagt	ttgacaggct	caaaataaat	420
	taccttaaat	acattaaaca	agaagtgtat	ttgttataca	gtatgtactg	acccaaattta	480
	aagtgcaggt	tgtacagaaa	gagctgcttg	tgttatttt	tgagcaaaat	gaaaagctaa	540
	tttggtacat	ttaaaaatca	gcatctagca	aattc			575

<210> 88
 <211> 663
 <212> DNA
 <213> Homo sapiens

<400> 88

cagtaattcg gcacgaggcg cactttttt tttttttttt tataaaaaca gtcaacactt	60
gccccaccct actcccagca tatgcacaca cacacgtgca cacacaatac tcacttaaca	120
aacatthaat ttattgaaca tttattatat gccaaagctg gtataagaca cccaaagagt	180
aagacagaaa gtattcttcc ctggagctt gtctgacttt ccaagctta ttaggcatca	240
aacaaaactg aagtgtttt taagattcaa gtctcctacg tcgtctaagg cagagtaagt	300
agccttcagt actatatttt actctaattt ttttttaaca caatggcagt actataagta	360
tgaaactttg gtataaatgt cagattctag attgtgctcc tgcttctgc acactctaatt	420
atttttaaac atctcgaaaa tacagagtgg cagaaaaatt acctgtaaaa acataactagc	480
tcaagagttt gacaggctca aaataaaatta ccttaaatac attaaacaag aagtgtattt	540
gttatacagt atgtactgac caaaattaaa gtgcaggttg tacagaaaga gctgcttgc	600
ttatttatg agcaaaatga aaagctaatt tggcacattt aaaaatcagc atctagcaaa	660
ttc	663

<210> 89
 <211> 80
 <212> DNA
 <213> Homo sapiens

<400> 89	
gattggatgg tgtttcagaa aacaagcctc tattcaaata atatttact ataattctg	60
ttaaaaatac tgtatactaa	80

<210> 90
 <211> 496
 <212> DNA
 <213> Homo sapiens

<400> 90	
gccgactttt tttttttttt tttttgtatt ttttagtagag acggggtttc aacatgttgg	60
ccagggatggt cgtgatctcc tgacctcggt atccgctgcc ttggctccc aaagtgtgg	120
aattacaagc gtgacgcact gtgccagct tagtatacag tatttttaac aagaattata	180
gtaaaaatatt atttgaatag aggcttgttt tctgaaacac catccaatct gaaagttagaa	240
gaaaaaggct ggggtgtggtg gctcatgcct gtaaccccag cactttggga agctgaggcg	300
ggcggatccc ttgagctcag tttgagacca ggctgggcaa ctccatctt accaaaaaat	360
acaaaaatga gccaggcatg gtgggttaca cctgtggtcc cagcggctct gggggctgag	420
gtggggagggaa ggcttgggccc taggaggtgg aggttgcagt gagccaggat tgtgccactg	480
ccgatagagc cagata	496

```

<210> 91
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (263)..(263)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (327)..(327)
<223> n=a, c, g or t

<400> 91
gaaatgggtc cgacaggtt aaaacaaaaa tccaatactg ccgtagttc taggtggata 60
taacatttt agaaatctta taatacaata ttaacttcat tggctgaacc caagctttc
agcctttata gatttgccat gatcctaata catataagca ttcattgtat tcattattaa 120
ttacttcata gattcagtgt gtgacgaagg gagatgattt ttaacaaata ataaagtcaa 180
atgatctagt tttgctatgt tgnttgagca acatcaaata gtttgctaa aatagataat 240
ttatagtgtat tttttttca ctatggatt ttcttaata tattaaggc tttcattttc 300
tgataccacc tagttaatt ggggg 360
385

<210> 92
<211> 500
<212> DNA
<213> Homo sapiens

<400> 92
gaaatgggtc cgacaggtt aaaacaaaaa tccaatactg ccgtagttc taggtggata 60
taacatttt agaaatctta taatacaata ttaacttcat tggctgaacc caagctttc
agcctttata gatttgccat gatcctaata catataagca ttcattgtat tcattattaa 120
ttacttcata gattcagtgt gtgacgaagg gagatgattt ttaacaaata ataaagtcaa 180
atgatctagt tttgctatgt tgnttgagca acatcaaata gtttgctta aaatagataa 240
tttatagtga ttttttttc actatggat tttcttaat atattaagtg ctttcattt 300
tctgatacca cctagttaa ttgggggtga atatcagaga aattagaatg ttatccagc 360
tgaaggagta cagtttttt tttctttct tagagaatat agtgcctcag atacagtcca 420
caacaaaaat tttggtttag 480
500

<210> 93
<211> 364
<212> DNA

```

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)..(19)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (21)..(21)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (35)..(35)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (40)..(40)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (60)..(60)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (70)..(70)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (92)..(93)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (95)..(95)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (97)..(97)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (121)..(122)
<223> n=a, c, g or t
```

```

<220>
<221> misc_feature
<222> (131)..(131)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (148)..(148)
<223> n=a, c, g or t

<400> 93
ttaggtccaa actcaggtta ncaaaaactag tcccnctcagn ccaatttgctt gtacatttcn      60
acaggcaccn ctttggcaaa cccacatgga tnnntnanaaa tggagaatga ggagacagcc      120
nnatattaat nagatgtatc aaactgttnac aatatgtgaa gagtattgtg tatatacaaa      180
caggaaacaa ttgaaaggct tcaacatgtg tgggtggggg gagagataac tgaattaaca      240
ggccatgttag taaaacttaa aatcaaatcc agtagtcttg aaggtatagt aattgtttag      300
tttgaaggt atagtaatta agtactgcgc actaaaaaaaaa actgaccaaa aggcgggtg      360
cggt                                         364

<210> 94
<211> 1646
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)..(19)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (21)..(21)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (35)..(35)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (40)..(40)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (60)..(60)

```

```

<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (70)..(70)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (92)..(93)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (95)..(95)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (97)..(97)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (121)..(122)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (131)..(131)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (148)..(148)
<223> n=a, c, g or t

<400> 94
ttaggtccaa actcaggtta ncaaaaactag tcccntcagn ccaattgctt gtacatttcn      60
acaggcaccn ctttggcaaa cccacatgga tnntnanaaa tggagaatga ggagacagcc      120
nnatattaaat nagatgtatc aaactgttac aatatgtgaa gagtattgtg tatatacaaa      180
caggaaacaa ttgaaaggct tcaacatgtg tgggtggggg gagagataac tgaattaaca      240
ggccatgttag taaaacttaa aatcaaatcc agtagtcttg aaggtatagt aattgtttag      300
ttttgaaggt atagtaatta agtactgcgc actaaaaaaaaa actgaccaaa aggcggggtg      360
cggtggctca cgcctgtaat cccagcactt tgggaggccg aggcgggcgg atcacctgag      420
gtcaggagtt cgagaccagc ctggccaaca tggtaaaacc ccgtctctac taaaaacaca      480

```

aaaattagcc	gggcatggtg	gctcacgcct	gtaatcccag	caactctggga	ggccaagaac	540
atgctgatgg	tttatgccac	aagttgacaa	ctgtgtgtcc	aactgtgaaa	cctcagactc	600
aaggcttagc	aaaagatgct	tggaaatcc	ctcgagaatc	tttgcgacta	gaggtaaac	660
taggacaagg	atgttcggc	gaagtgtgga	tggaaacatg	aatggaaacc	acgaaaagtag	720
caatcaaaac	actaaaacca	ggtacaatga	tgccagaagc	tttccttcaa	gaagctcaga	780
taatgaaaaa	attaagacat	gataaacttg	ttccactata	tgctgttg	tctgaagaac	840
caatttacat	tgtcactgaa	tttatgtcaa	aaggtgctt	ttcccttct	attcgtgatt	900
gggatgagat	aagggtgac	aatgtgaaac	actacaaaat	taggaaactt	gacaatggtg	960
gatactatat	cacaaccaga	gcacaattt	atactctgca	gaaattggtg	aaacactaca	1020
cagaacatgc	tgatggttt	tgccacaagt	tgacaactgt	gtgtccaact	gtgaaacctc	1080
agactcaagg	tctagaaaaa	gatgcttggg	aaatccctcg	agaatcttg	cgactagagg	1140
ttaaacttagg	acaaggatgt	ttcggcgaag	tgtggatggg	aacatggaat	ggaaccacga	1200
aagtagcaat	caaaacacta	aaaccaggt	caatgatgcc	agaagcttc	cttcaagaag	1260
ctcagataat	gaaaaaatta	agacatgata	aacttgtcc	actatatgt	gttgtttctg	1320
aagaaccaat	ttacattgtc	actgaattt	tgtcaaaaga	gctccacaga	cgctgcacag	1380
ctgtgaactc	aactccagcc	ctcagggaaag	gcagctcgca	aagacctagg	gcagccgccc	1440
gatttcccaa	aaagagcaact	gagaacccag	caagcgttt	tctatatgt	gctggcggca	1500
gcccaagttag	ggaagtgcaa	caagtatgg	tctcctgctt	gtcaactgt	gaaacagcga	1560
ccctgaaagt	ggaggagcca	cagctggaat	cgtgttcgtc	tgaatacacg	caccttcct	1620
atgagccttg	taaagccagt	cgttga				1646

<210> 95
 <211> 415
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (109)..(173)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (313)..(313)
 <223> n=a, c, g or t

<220>
 <221> misc_feature

<222> (315)..(315)
 <223> n=a, c, g or t

<400> 95
 gagagtgttt tagcccgaaa tagtggaaacc ctcaggcaaa gtttataaaaa attaatacca 60
 ctgcagaaag tgattaaata ccatggactg taggtttagg tttctgctnn nnnnnnnnnnn
 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnngtgcata 120
 atggagattt taatagtagc catctcataa ggtggttgca aaggttaaat gtgttaatat 180
 gcatgatgca catagaacaa tgcctagcac atagtagaga tacataatca ctactatata 300
 ctggtaccag tananggtca ggtcttatgg acctaaggc atataactta gtctttcca 360
 agattcttga aatgatttct caaaacaaga gaatataaag aagaaacgtt atgaa 415

<210> 96
 <211> 504
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (212)..(231)
 <223> n=a, c, g or t

<400> 96
 atatccta atgagcatgc ccattattcc tctgtcctat gaaacaaaaa tggcatttt 60
 caatggattt gttttggata tataattagt tcatttgctg tttagaagcc ttgccaaaag 120
 tggtagatt ttggactgc aactgcttc ctctgccc gaaatgttt gcctttctt 180
 ttcctacaag ttaaatgttc taaatataaa gnnnnnnnnnn nnnnnnnnnnn naattcta 240
 gtgaaaggca ctagctgtct aataggtttc atgtatcatt actattacta tatgtatctt 300
 aatgttagtct atgttaggttt ttatcagaaa gtgtacctt ctatggtta ttatcttata 360
 ttctggggcc ttttatctca gatataaacc atgaacagta atgatagtcc ctgacatata 420
 aatcttagta aaaagtgatt aaaaatctaa aactcagttt gaaaaacata tcttggtagc 480
 ataaattaaa accttttatt gttt 504

<210> 97
 <211> 516
 <212> DNA
 <213> Homo sapiens

<400> 97
 atatccta atgagcatgc ccattattcc tctgtcctat gaaacaaaaa tggcatttt 60
 caatggattt gttttggata tataattagt tcatttgctg tttagaagcc ttgccaaaag 120

tgttagatt ttggtaactgc aactgcttc ctcttgcaca gaaatgttt gcctcttctt	180
ttcctacaag ttaaatgttc taaatataaa gggatgtg tggatgtgtg taattctaat	240
gtgaaaggca ctagctgtct aataggtttc atgtatcatt actattacta tatgtatctt	300
aatgttagtct atgttaggttt ttatcagaaa gtgtacctt ctatggttt ttatgttata	360
ttctggggcc ttttatctca gatataaacc atgaacagta atgatagtc ctgacatata	420
aatcttagta aaaagtgatt aaaaatctaa aactcagttt gaaaaacata tcttggtagc	480
ataaatttaaa accttttatt gttaaaaaaaaaaaaaa	516

<210> 98
 <211> 400
 <212> DNA
 <213> Homo sapiens

aattagatct ttcctgcaat aaggatctag gtggaggttt tgaagactcg ccggctcagt	60
tggcatgct aaagcatctt caagtcctag atcttcacca gtgctacta acagcagatg	120
acgtgatgtc actgacccag gtcattcctt tactttcaaa tcttcaagaa ttggatttat	180
cagccaaacaa aaagatgggc agttcttctg aaaacttact cagcaggctc cgatTTTAC	240
cagcattgaa gtcatttagtt atcaacaact gtgcttgaa gagtgagact tttacagctc	300
ttgctgaagc ctctgttac ctctctgctc tggaagtatt caaccttct tggaaacaag	360
tgtgtggtg ggcaacttga agctgcttct gggaaacact	400

<210> 99
 <211> 2352
 <212> DNA
 <213> Homo sapiens

atttttagttt aacacaggct tgacagaatc ttctttctt ctttagaaatc ctagaaaaca	60
gaaagcaaca ggaagatgtc ttattggaa ctaccccat caacttcacc atgagtcaaa	120
caaggaagaa aacttcctca gaaggagaaa ctaagccccca gacttcaact gtcaacaaat	180
ttctcagggg ctccaatgtc gaaagcagaa aagaggacaa tgaccttaaa acaagtgatt	240
cccaacccag cgactggata cagaagacag ccacccctcaga gactgctaaag cctctcagtt	300
cagaaatgga atggagatcc agtatggaga aaaatgagca ttccctgcag aagctggca	360
aaaaggctgt caacaagtgt ctagatttga ataactgtgg attaacaaca gcggacatga	420
aagaaatggg agaagcattt gagatgatcc ctgaacttga agagctaaat ttgtcttgaa	480
acagtaaagt gggaggaaat ttgcctctga tccttcagaa gttccaaaaaa gggagcaaga	540
tacaaatgat tgagcttggc gttgtctccc tcacgtcaga agatgggaca ttctgggtc	600

aactgctacc tatgctgcaa agtctcgaa tacttgatct ttccattaac agagacattg	660
ttggcagtct gaacagtatt gctcaggat taaaaagcac ctcaaatctg aaagtactga	720
agttacattc atgtggatta tcacaaaaga gtgtaaaaat attggatgct gcttttaggt	780
atttgggtga gctgagggaa ttagatctt cctgcaataa ggatctaggt ggaggtttg	840
aagactcgcc ggctcagttg gtcatgctaa agcatctaca agtcctagat cttcaccagt	900
gctcactaac agcagatgac gtgatgtcac tgaccaggat cattccttta ctttcaaattc	960
ttcaagaatt ggatttatca gccaacaaaa agatggcag ttcttctgaa aacttactca	1020
gcaggctccg attttacca gcattgaagt cattagttat caacaactgt gctttggaga	1080
gtgagacttt tacagcttt gctgaagcct ctgttcaccc ctctgctctg gaagtattca	1140
acctttcttg gaacaagtgt gttggtggca acttgaagct gcttctggaa acactaaagc	1200
tttccatgtc tcttcaagtg ctgaggctga gcagctgttc cctggtgaca gaggatgtgg	1260
ctctcctggc atcggcata cagacgggtc atctggccaa actgcaaaaag ctggacctga	1320
gctacaatga cagcatctgt gatgcggggt ggaccatgtt ctgcaaaaac gtgcggttcc	1380
tcaaagagct aatcgagctg gatattagcc ttgcaccatc aaattttcga gattgtggac	1440
aatggtttag acacttgtta tatgctgtga ccaagcttcc tcagatcact gagataggaa	1500
tgaaaagatg gattctccca gcttcacagg aggaagaact agaatgctt gaccaagata	1560
aaaaaaagaag cattcacttt gaccatggg ggtttcagta aactgatttc ccatgtccta	1620
ctaaagctaca aaccattctc caaaggaaaaaa gaacatgaac gaattccaga gtcatgaact	1680
gaatttcaac ttctggcca ttaatggga cttatattac aagagcttgg taaatatata	1740
tatataattac atatatataat gtaatataca tatatacaca tatataataat atacatataat	1800
aatacacata tatatgtaaa tatataataa atatctaata tgagcatgcc attattctct	1860
gtctatgaaa caaaaatggc attttcaat ggatttggg tggatataataat tagttcat	1920
ttgctgttta gaagccttgc caaaagtgtt tagattttgg tactgcaact gcttcctct	1980
tgcccagaaa tgttttgcct cttctttcc tacaagttaa atgttctaaa tataaagggg	2040
tatgtgtgtg tgtgtgtaat tcaatgtga aaggcactag ctgtctaata gtttcatgt	2100
tcattactat tactatatgt atcttaatgt agtctatgtta ggttttatc agaaagtgt	2160
cctttctatg gtttattatt ttatattctg gtgcctttta tctcagatataaa accatgaa	2220
cagtaatgtat agtcactgac atataaatct tagaaaaag tgataaaaaa tctaaaactc	2280
agtatgaaaaa acatatcttg ttagaataaa ttaaaacctt ttattgttta aaaaattgtt	2340
aaaaaaaaaa aa	2352

<210> 100
 <211> 565
 <212> DNA
 <213> Homo sapiens

<400> 100
 atttgattt aacacaggct tgacagaatc ttctttctt ctttagaaatc ctagaaaaca 60
 gaaagcaaca ggaagatgtc ttattggaa ctaccccat caacttcacc atgagtcaaa 120
 caaggaagaa aacttcctca gaaggagaaa ctaagccccca gacttcaact gtcaacaaat 180
 ttctcagggg ctccaatgct gaaagcagaa aagaggacaa tgaccttaaa acaagtgatt 240
 cccaaacccag cgactggata cagaagacag ccacccctcaga gactgctaag cctctcagtt 300
 cagaaatgga atggagatcc agtatggaga aaaatgagca tttcctgcag aagctggca 360
 aaaaggctgt caacaagtgt ctagatttga ataactgtgg attaacaaca gcggacatga 420
 aagaaatggt tgccttgctg cctttctcc cagacttgga agaactggat atctcctgga 480
 atggtttgta ggtggAACCC tcctttccat cactcagcaa atgcatctgg tcagcaagtt 540
 aaaaatcttggta aggctggta gctgc 565

<210> 101
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 101

Met Leu Leu His Asp Ile Asp Trp His Leu Met Ser Ile
 1 5 10

<210> 102
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 102

Met Val Leu Pro Gly Ser Leu Ser Met Leu Thr Tyr Gly Met
 1 5 10

<210> 103
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 103

Met Gln Val Leu Tyr Trp Thr Tyr Leu Leu Ile Leu Phe Pro Thr
 1 5 10 15

Phe Thr Cys Leu Phe Ile Phe
20

<210> 104
<211> 26
<212> PRT
<213> Homo sapiens

<400> 104

Met Asn Leu Tyr Met Asn Leu Pro Ser Ala Val Arg Phe Ser Arg Ala
1 5 10 15

Thr Pro Leu Ile Ser Leu Phe Leu Ala Leu
20 25

<210> 105
<211> 49
<212> PRT
<213> Homo sapiens

<400> 105

Met Thr Thr Lys Lys Gln Glu Glu Cys Glu Ser Leu Lys Asp Lys Gln
1 5 10 15

Lys Ala Thr Lys Gln Ser Ile Ser Phe Cys Ile Tyr Ile Ile Lys Val
20 25 30

Lys Phe Ser Thr Leu Ala Thr Asp Tyr Lys Ser Val Pro Ser Gly Cys
35 40 45

Cys

<210> 106
<211> 61
<212> PRT
<213> Homo sapiens

<400> 106

Met Pro Ser Pro Ser Ala Pro Ser Ile Val Pro Val Leu His Gly Cys
1 5 10 15

Trp Val His Ile Cys Gln Ala Asp Val Tyr His Thr Leu Leu Lys Gly
20 25 30

Phe Lys Ser Val Phe Glu Thr Glu Ser His Val Val Ser Pro Arg Leu
35 40 45

Glu Cys Asn Gln Ser Lys Thr Pro Leu Lys Lys Asn Lys
 50 55 60

<210> 107
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 107

Met Glu Leu Val Met Glu Trp Lys Leu Thr Ile Cys Ser Pro Lys Cys
 1 5 10 15

Ala Thr Thr Thr Gln Gly Leu Gln Thr Asp Ser Tyr Leu Asp Val Val
 20 25 30

Glu Ser

<210> 108
 <211> 77
 <212> PRT
 <213> Homo sapiens

<400> 108

Met Val Asn Pro Ala Gln Glu Met Thr Leu Ser Arg Asn Thr Cys Lys
 1 5 10 15

Tyr Lys Lys Gln Asp Ile Leu Pro Gln Leu Arg Ser Asp Lys Ile Thr
 20 25 30

Leu Gly Lys Leu Gln Gly Gln Cys Ala Ser Lys Thr Lys Ser Leu Val
 35 40 45

Ser Ser Leu Thr Ser Tyr Leu Pro Ala Phe Ile Ile Ser Leu Ser
 50 55 60

Val Thr Gln Tyr Leu Val Asn Phe Leu Phe Trp His Thr
 65 70 75

<210> 109
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 109

Met Gln Cys Lys His Phe Phe Leu Thr Tyr Leu Thr Asp Gln Gly Gly
 1 5 10 15

Gln Val Ala Leu Leu Ser Ser Phe Pro Pro Cys Gly Asp Ser Gly Ile
20 25 30

Gln Ala His Ser Ile Thr Arg Leu Ser His Ile Gly Val Phe His Phe
35 40 45

Gly Asp Glu Asp Glu Gly Glu Ser Gly Arg Glu
50 55

<210> 110
<211> 91
<212> PRT
<213> Homo sapiens

<400> 110

Met Asp Val Met Gly Lys Leu Lys Gly Ser Cys Asp Glu Thr Gly Ser
1 5 10 15

Glu Asn Ser Asp Gly Asp Leu Ser Lys Val Ile Leu Pro Lys His His
20 25 30

Leu Ala Ile Met Ile Pro Pro Asn Leu Ser Gln Phe Val Tyr Phe Ile
35 40 45

Ser Arg Gly Ser Phe Ser Val Leu Ala Ser Cys Val Phe Val Phe Phe
50 55 60

Phe Phe Ser Val Ile Leu Gln Ala Gln Asp Phe Leu Leu Asp Thr Gly
65 70 75 80

Arg Ile Ser Leu Leu Lys Glu Ala Gly Gly Thr
85 90

<210> 111
<211> 45
<212> PRT
<213> Homo sapiens

<400> 111

Met Gly His Val Asp Gln Leu Ser Pro Arg Thr Thr Asn Leu Ala Cys
1 5 10 15

Ser Asp Asp Leu Cys Ser Arg Gln Gly Phe Arg Leu Asp Cys Cys Ser
20 25 30

Ser Leu Trp Arg His Asn Pro Asn Cys Glu Leu Leu Asn
35 40 45

<210> 112
<211> 64
<212> PRT
<213> Homo sapiens

<400> 112

Met Leu Lys Met Ile Leu Ala Ser Ile Val Ile Asn Ser Val Ile Pro
1 5 10 15

Glu Phe Phe Val Ser Pro Arg His Thr Asn Phe Cys Pro Leu Leu Leu
20 25 30

Phe Ser Gln Ser Phe Leu Leu Ala Phe Leu Ser Asn Arg Val Leu Leu
35 40 45

Thr Pro Tyr Ile Pro Phe Trp Leu Val Arg Val Ser Phe Ser Ser Ser
50 55 60

<210> 113
<211> 25
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> X=any amino acid

<400> 113

Met Leu Leu Phe Thr Lys Leu Leu Ile Ile Met Val Ile Xaa Ile Asn
1 5 10 15

Xaa Asn Asn Lys Leu Leu Gln Leu Phe
20 25

<210> 114
<211> 57
<212> PRT
<213> Homo sapiens

<400> 114

Met Arg Ile Gln Asn Leu Thr Cys Leu Leu Gly Ser Lys Glu Met
1 5 10 15

Ser Thr Ser Ser Pro Leu Thr Pro Asn Gly Val Glu Gly Phe Gly Pro
20 25 30

Gln His Cys Val Thr Tyr Ser His His Asp Phe Leu Ala Gln Val Thr
35 40 45

Pro Ser Val Lys Trp Lys Arg Glu Glu
50 55

<210> 115

<211> 147

<212> PRT

<213> Homo sapiens

<400> 115

Met Asn Glu Ser Trp Ala Gly Pro Gly Pro Ala Glu Arg Ala Glu Glu
1 5 10 15

Ala Val Ser Gly Val Gly Val Glu Ala Lys Thr Gln His Ala Gly Gln
20 25 30

Gly Ala Gln Pro Gly Gly Met Gly Cys Gly Phe Ser Ser Gly Pro Ile
35 40 45

Gly Met Ala Leu Gly Leu Gly Leu Val Gly Thr Ala Ala Thr Arg Gly
50 55 60

Gly Ser Ser Ala Trp Pro Asp Ser Thr Cys Asn Val Gly Arg Gln Trp
65 70 75 80

Ala Pro Pro Gly Gly Arg Asn Thr Val Arg Ser Met Gln Arg Ala Gly
85 90 95

Asp His Gly Ala Cys Asp Leu Arg Ala His Pro Gly Gln Thr Trp Val
100 105 110

Arg Gly Gly Leu Gly Arg Gln Asp Ser Glu Gly Leu Gln Gly Val Phe
115 120 125

Val Leu Cys Pro Tyr Thr Gly Asp Leu His Gly Arg Val Arg Ser Ile
130 135 140

Arg Met Leu
145

<210> 116

<211> 73
 <212> PRT
 <213> Homo sapiens

<400> 116

Met Thr Ile Ser Leu Cys Ala Thr Asn Leu Pro Arg Ala Ala Thr Val
 1 5 10 15

Leu Arg Met Lys Pro Lys Leu Pro Gly Ser Gly Pro Val Gln His Glu
 20 25 30

Pro His Leu Pro Ser Gln Pro Gln His Pro Leu Leu Phe Phe Gln Ala
 35 40 45

Gly Gly Lys Leu Glu Ala His Pro His Phe Thr Gln Thr Leu Gly Ile
 50 55 60

Pro Ile Ser Gly Asn Arg Gly Val Phe
 65 70

<210> 117
 <211> 48
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (46)..(46)
 <223> X=any amino acid

<400> 117

Met Tyr Asn Ile Leu Lys Ala Phe Asp Lys Ile Val His Ile Ile Ser
 1 5 10 15

Asn Thr Ile Leu Tyr Tyr Gln Gln His Lys Ala Asn Val Ser Lys
 20 25 30

Asn Ser Arg Leu Arg Ile Ser Lys Asn Ser Pro Arg Ala Xaa Phe Arg
 35 40 45

<210> 118
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 118

Met Leu Pro Val Ser Pro Thr Leu Lys Glu Arg Asn Gln Arg Arg Met
 1 5 10 15

Leu Leu Lys Ser Thr His Leu Ala Ser Val Ser Ser Ala Ser Cys Thr
 20 25 30

Gln Thr Lys His Thr Gly
 35

<210> 119
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 119

Met Lys Ile Phe Ile Ile Ile Leu Ser Pro Leu Cys Gly Ile Leu Leu
 1 5 10 15

Asn Val Leu Glu Ser Leu Lys Phe Ile Phe Lys Cys Glu Ser Leu Leu
 20 25 30

Phe Val Trp Gly Glu Glu Cys Gln Val Gly Ile Met Asn Gln Ala Leu
 35 40 45

Pro Tyr Gln Val Leu Leu Tyr
 50 55

<210> 120
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 120

Glu Ser His Thr Leu Gln Val Ile Leu Gly Cys Glu Met Gln Glu Asp
 1 5 10 15

Asn Ser Thr Glu Gly Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp His
 20 25 30

Leu Glu Phe Cys Pro Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro Arg
 35 40 45

Ala Trp Pro Thr Lys Leu Glu Trp Glu Arg His Lys Ile Arg Ala Arg
 50 55 60

Gln Asn Arg Ala Tyr Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln Gln
 65 70 75 80

Leu Leu Glu Leu Gly Arg Gly Val Leu Asp Gln Gln
 85 90

<210> 121
 <211> 85
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (51)..(72)
 <223> X=any amino acid

<400> 121

Met Ile Lys Val Ser Leu Thr Ser Ala Pro Lys Val Ser Ser Leu Glu
 1 5 10 15

Gly Thr Asn Arg Arg Glu His Ser Asp Thr Gln Gly Pro Leu Ser Val
 20 25 30

Pro Trp Lys Pro Ser Asp Leu Cys Arg Pro Ile Ser Val Arg Lys Trp
 35 40 45

Val Ala Xaa
 50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Thr Thr Gln Ser Ser Trp Gln
 65 70 75 80

Ile Leu Asn Lys Gly
 85

<210> 122
 <211> 20
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (15)..(15)
 <223> X=any amino acid

<400> 122

Met Gly Gly Ala Trp Ser Ile Ala Gly Pro Leu Thr Gly Phe Xaa Phe
 1 5 10 15

Arg Leu Thr Phe
 20

<210> 123

<211> 103
<212> PRT
<213> *Homo sapiens*

<400> 123

Phe Tyr Phe Leu Phe Ser Phe Val Leu Arg Trp Ser Phe Thr Leu Val
1 5 10 15

Thr Gln Ala Gly Val Gln Trp Cys Asp Leu Gly Ser Leu Gln Pro Pro
20 25 30

Pro Pro Arg Leu Lys Ala Phe Ser Cys Leu Gly Leu Pro Ser Ser Trp
35 40 45

Asp Tyr Arg His Ala Leu Gln Arg Pro Ala Asn Phe Ala Phe Leu Val
50 55 60

Glu Ile Gly Phe His His Val Gly Gln Ala Gly Pro Gln Leu Leu Thr
 65 70 75 80

Ser Gly Asp Pro Ser Ile Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly
85 90 95

Val Thr Ala Val Pro Gly Pro
100

<210> 124
<211> 48
<212> PRT
<213> *Homo sapiens*

```
<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> X=any amino acid
```

```
<220>
<221> MISC_FEATURE
<222> (13)..(43)
<223> X=any amino acid
```

<400> 124

Met	Val	Val	Ile	Gln	Ala	Xaa	Glu	Glu	Glu	Lys	Thr	Xaa	Xaa	Xaa	Xaa
1				5					10					15	

Xaa Ile Trp Lys Ile Cys
 35 40 45

<210> 125
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 125

Met Ser Ser Tyr Met Ile Asn Lys Phe Leu Pro Ile Lys Lys Val Lys
 1 5 10 15

Ile Pro Gly His Lys Val Phe Ser Thr Asp Ile Met Phe Leu Lys Phe
 20 25 30

Val Ser Ile Ala Thr Leu Leu Arg Arg His Thr Asp Ile Ser Glu Asp
 35 40 45

Leu Arg Val Leu Gln Asn Thr Glu Lys Ile Ser Arg Arg Lys Gly Lys
 50 55 60

Gly Glu Thr Lys Lys Leu Lys Glu Gly Leu Thr Tyr Lys Trp Asn Asp
 65 70 75 80

Leu Lys Arg Asn Gly Glu Pro Gly Glu Thr Gly Val Ser Gln Ser
 85 90 95

<210> 126
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 126

Met Ile Lys Tyr Phe Lys Ser Asn Asn Tyr Lys Phe Asn Tyr Tyr Lys
 1 5 10 15

Thr Ser Ser Leu Thr Ser Asp Cys Phe Val Leu Ser Phe Lys Ile Ile
 20 25 30

Met Val Cys Leu Arg Val Cys Leu Leu Asn Thr Phe Ala Tyr Leu Pro
 35 40 45

<210> 127
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 127

Met Glu Phe Arg Ser Val Ala Gln Val Gly Val Gln Trp Arg Asp Leu
1 5 10 15

Gly Leu Leu Gln Pro Leu Pro Leu Gln Phe Lys Gln Phe Tyr Cys Leu
20 25 30

Ser Leu Ser Ser Trp Asp Tyr Arg His Ser Pro Pro His Pro Ala
35 40 45

Asn Phe Leu Tyr Phe Ala Lys Ile Leu Tyr Ile Ala Lys Arg Phe His
50 55 60

His Val Gly Gln Ala Gly Leu Ala Leu Leu Thr Ser Gly Asp Pro Pro
65 70 75 80

Thr Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser His Cys Ala
85 90 95

Gln Pro

<210> 128
<211> 50
<212> PRT
<213> Homo sapiens

<400> 128

Met Gly Lys Arg Arg Asp Ser Trp Thr Asn Arg Glu Arg Gln Leu Glu
1 5 10 15

Asn Lys Ser Met Gln Lys Ile Ile Tyr Asn Lys Ile Met His Leu Thr
20 25 30

Leu Val Thr Lys Gln Ile Ser Tyr Pro His Phe Ser Leu Ser Val Phe
35 40 45

Val Ser
50

<210> 129
<211> 16
<212> PRT
<213> Homo sapiens

<400> 129

Met Leu Leu Phe Val Leu Ser Leu Val Phe Gln Tyr Gln Phe Asn Thr
1 5 10 15

<210> 130
<211> 54
<212> PRT
<213> Homo sapiens

<400> 130

Met Ala Leu His Cys Phe Thr Ser Gly Leu Trp Ile Ala Ser Val Arg
1 5 10 15

Lys Lys Val Lys Met Lys Glu Lys Val Glu Gln Ile Leu Ala Thr Glu
20 25 30

Pro Pro Glu Asp Ser Cys Pro Phe Ser Asn Lys Leu Ser Gly Lys Cys
35 40 45

Cys Cys His Gly Ser Thr
50

<210> 131
<211> 41
<212> PRT
<213> Homo sapiens

<400> 131

Met Cys Ala His Lys Gly Lys Ala Met Arg Glu Arg Thr Gln Pro Glu
1 5 10 15

Gly Gly His Leu Ala Ser Gln Gly Glu Ala Leu Arg Glu Thr Lys Pro
20 25 30

Ala Arg Leu Gly Thr Val Ala His Gly
35 40

<210> 132
<211> 35
<212> PRT
<213> Homo sapiens

<400> 132

Met Ala Leu Ile Leu Leu Glu Ala Leu Cys Phe Gly Leu Ile Ile Cys
1 5 10 15

Met Asn Arg Glu Ser Ile Ser Thr Leu Ile Phe Tyr Lys His Trp Met
20 25 30

Ser Ile Leu
35

<210> 133
<211> 58
<212> PRT
<213> Homo sapiens

<400> 133

Met Phe Asn Ala Tyr Leu Leu Tyr Asn Asn Gln Val Ile Thr Val Gln
1 5 10 15

Ile Lys Gly Pro Lys Cys Phe Arg Tyr Asp Ile Ile Leu Ser Ile Val
20 25 30

Asn Trp Thr Lys Glu Thr Leu Tyr Val Gln Gly Ser Val Glu Gln Pro
35 40 45

Trp Cys Ser Trp Asp Met Leu Pro Arg Cys
50 55

<210> 134
<211> 27
<212> PRT
<213> Homo sapiens

<400> 134

Met Met Lys Leu Cys Phe Thr Ala Ser Leu Leu His Gly Ala Leu Leu
1 5 10 15

Trp His Leu Ala Thr Thr Asn Ser Leu Ile Pro
20 25

<210> 135
<211> 46
<212> PRT
<213> Homo sapiens

<400> 135

Met Glu Leu Pro Ser Met Cys Pro Ile Leu Phe Phe Val Thr Val Phe
1 5 10 15

Phe Met Tyr His Thr Pro Ser Cys Pro Ser Ser Val Pro Gln Thr His
20 25 30

Gln Ser His Phe Leu Leu Thr Ala Leu Gly Leu Ala Leu Thr
35 40 45

<210> 136
<211> 77
<212> PRT

<213> Homo sapiens

<400> 136

Met Thr Cys Pro Gly Gly Glu Thr Gly Trp Gly Cys Leu Arg Met Asp
1 5 10 15

Pro Arg Glu Trp Val Ser Ser Pro Asp Gln Gln Asn Leu Arg Met Cys
20 25 30

Ala Trp Ile Gln Pro His Leu Lys Leu Gly Leu His Phe Val Ser Gly
35 40 45

Ala Pro Asn Ala Leu Cys Leu Gly Cys Leu Tyr Ser Trp His Thr Gly
50 55 60

Glu Ala Leu Ser Pro Ala Gly Pro Gly Cys Cys Cys Ser
65 70 75

<210> 137

<211> 37

<212> PRT

<213> Homo sapiens

<400> 137

Met Glu Gln Glu Ser Val Pro Ser Met Ser Leu Phe Thr Arg Ile Leu
1 5 10 15

Ser Gln Pro Ser Leu Phe Pro Trp Gln Ala Leu His Arg Glu Thr Gly
20 25 30

Lys Arg Ser Thr Val
35

<210> 138

<211> 59

<212> PRT

<213> Homo sapiens

<400> 138

Met Leu Leu Pro Leu Pro Ala Ile Ser Phe Pro Cys Asn Ser Leu Phe
1 5 10 15

His Pro Ala Asp Ala Ser Ser Leu Ser Trp Leu Ser Ser Lys Ser Tyr
20 25 30

Pro Leu Gly Lys Leu Thr Arg Met Leu Gln Ser Asp Gly Val Ser Pro
35 40 45

Pro Gly Pro Pro Gln Thr Leu Tyr Phe Leu Leu
50 55

<210> 139
<211> 50
<212> PRT
<213> Homo sapiens

<400> 139

Met Asp Asn Lys Cys Leu Thr Leu Thr Asn Tyr Leu Ala Ile Met Gly
1 5 10 15

Phe Phe Asp Gln Lys Ser Ser Lys Arg Val Trp Trp Gly Leu Arg Asp
20 25 30

Pro Ser Ser Leu Pro Lys Asn Met Lys Ser Phe His Phe Gln Tyr Val
35 40 45

Lys Thr
50

<210> 140
<211> 72
<212> PRT
<213> Homo sapiens

<400> 140

Met Arg Val Val Phe Lys Ile Thr Phe Cys Arg Val Val Cys Ser Thr
1 5 10 15

Leu Met Leu Lys Gly Ser His Leu Pro Gln Pro Ile Lys Leu Cys Cys
20 25 30

Leu Cys Ser Ala Phe Tyr His Lys Asn Met Thr Phe Lys His Lys Asn
35 40 45

Thr Leu Tyr Ser Thr Thr Lys Asn Arg Asn Asp Ile Tyr Leu His Cys
50 55 60

Phe Pro Ile Ser Leu His Leu Tyr
65 70

<210> 141
<211> 863
<212> PRT
<213> Homo sapiens

<400> 141

Met Pro Glu Gln His Lys Asp Pro Arg Val Gln Glu Asn Pro Asp Asp
1 5 10 15

Gln Arg Thr Val Pro Glu Val Thr Gly Asp Ala Arg Ser Ala Phe Trp
20 25 30

Pro Leu Arg Asp Asn Gly Gly Pro Ser Pro Phe Val Pro Arg Pro Gly
35 40 45

Pro Leu Gln Thr Asp Leu His Ala Gln Ser Ser Glu Ile Arg Tyr Asn
50 55 60

His Thr Ser Gln Thr Ser Trp Thr Ser Ser Ser Thr Lys Arg Asn Ala
65 70 75 80

Ile Ser Ser Ser Tyr Ser Ser Thr Gly Gly Leu Pro Gly Leu Lys Gln
85 90 95

Arg Arg Gly Pro Ala Ser Ser Arg Cys Gln Leu Thr Leu Ser Tyr Ser
100 105 110

Lys Thr Val Ser Glu Asp Arg Pro Gln Ala Val Ser Ser Gly His Thr
115 120 125

Arg Cys Glu Lys Gly Ala Asp Thr Ser Pro Gly Gln Thr Ile Ala Pro
130 135 140

Thr Gly Gly Ser Pro Arg Ser His Asp Ser Arg Pro Arg Arg Arg Lys
145 150 155 160

Ile Pro Leu Leu Pro Arg Arg Arg Gly Glu Pro Leu Met Leu Pro Pro
165 170 175

Pro Leu Glu Leu Gly Tyr Arg Val Thr Ala Glu Asp Leu His Leu Glu
180 185 190

Lys Glu Thr Ala Phe Gln Arg Ile Asn Ser Ala Leu His Val Glu Asp
195 200 205

Lys Ala Ile Pro Asp Cys Arg Pro Ser Arg Pro Ser His Thr Leu Ser
210 215 220

Ser Leu Ala Thr Gly Ala Ser Gly Gly Pro Pro Val Ser Lys Ala Pro
225 230 235 240

Thr Met Asp Ala Gln Gln Asp Arg Pro Lys Ser Gln Asp Cys Leu Gly
245 250 255

Leu Val Ala Pro Leu Ala Ser Ala Ala Glu Val Pro Ala Thr Ala Pro
260 265 270

Val Ser Gly Lys Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser
275 280 285

Asp Pro Leu Pro Ala Asn Ser Ser His Ser Arg Asp Ser Ala Gln Val
290 295 300

Thr Ser Met Ile Pro Ala Pro Phe Thr Ala Ala Ser Arg Asp Ala Gly
305 310 315 320

Met Arg Arg Thr Arg Ser Ala Pro Ala Ala Ala Ala Ala Pro Pro
325 330 335

Pro Ser Thr Leu Asn Pro Thr Ser Gly Ser Leu Leu Asn Ala Val Asp
340 345 350

Gly Gly Pro Ser His Phe Leu Ala Ser Ala Thr Ala Ala Ala Arg Ala
355 360 365

Gln Arg Ser Glu Val Arg Tyr Asn Gln Arg Ser Gln Thr Ser Arg Thr
370 375 380

Arg Ser Cys Leu Lys Arg Asn Ala Ser Ser Ser Ser His Ser Ser Thr
385 390 395 400

Glu Gly Leu Gln Glu Val Lys Arg Arg Arg Gly Pro Ala Ser Ser His
405 410 415

Cys Gln Leu Ala His Ser Ser Ser Asn Thr Val Ser Glu Asp Gly Pro
420 425 430

Gln Ala Val Ser Ser Gly His Arg Cys Glu Asn Lys Ala Gly Thr Ala
435 440 445

Pro Gly Gln Thr Leu Ala Pro Arg Gly Gly Ser Pro Arg Ser Gln Ala
450 455 460

Ser Arg Pro His Ile Asn Thr Ala Leu His Val Glu Asp Lys Ala Ile
465 470 475 480

Ser Asp Cys Arg Pro Ser Arg Pro Ser His Thr Leu Ser Ser Leu Ala

485

490

495

Thr Gly Ala Ser Gly Gly Pro Pro Val Ser Lys Ala Pro Thr Met Asp
500 505 510

Ala Gln Gln Asp Arg Pro Lys Ser Gln Asp Ser Leu Gly Leu Leu Ala
515 520 525

Pro Leu Ala Ser Ala Ala Glu Val Pro Ser Thr Ala Pro Val Ser Gly
530 535 540

Lys Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser Asp Pro Leu
545 550 555 560

Pro Ala Thr Ser Tyr His Ser Arg Asp Thr Ala Gln Val Thr Ser Leu
565 570 575

Ile Pro Ala Thr Phe Thr Ala Ala Ser Arg Asp Ala Gly Met Arg Arg
580 585 590

Thr Arg Ser Ala Pro Ala Ala Ala Thr Ala Ala Pro Pro Pro Ser Thr
595 600 605

Leu Asn Asn Thr Ser Gly Ser Leu Leu Asn Ala Val Asp Gly Gly Pro
610 615 620

Ser His Phe Leu Ala Ser Ala Thr Ala Ala Arg Ala Gln Arg Ser
625 630 635 640

Glu Val Arg Tyr Asn Gln Arg Ser Gln Thr Ser Arg Thr Arg Ser Cys
645 650 655

Leu Lys Arg Asn Ala Ser Ser Ser Ser Ser His Ser Ser Thr Glu
660 665 670

Gly Leu Gln Glu Val Lys Arg Arg Arg Gly Pro Ala Ser Ser His Cys
675 680 685

Gln Leu Ala His Ser Ser Asn Thr Val Ser Glu Asp Gly Pro Gln
690 695 700

Ala Val Ser Ser Gly His Arg Cys Glu Asn Lys Ala Gly Thr Ala Pro
705 710 715 720

Gly Gln Thr Leu Ala Pro Arg Gly Gly Ser Pro Arg Ser Gln Ala Ser
725 730 735

Arg Pro His Ile Asn Ser Ala Leu His Val Glu Asp Lys Ala Ile Ser
 740 745 750

Asp Cys Arg Pro Ser Arg Pro Ser His Thr Leu Ser Ser Leu Ala Thr
 755 760 765

Gly Ala Ser Gly Gly Pro Pro Val Ser Lys Ala Pro Thr Met Asp Ala
 770 775 780

Gln Gln Asp Arg Pro Lys Ser Gln Asp Cys Leu Gly Leu Leu Ala Pro
 785 790 795 800

Leu Ala Ser Ala Ala Glu Val Phe Ser Thr Ala Pro Val Ser Gly Lys
 805 810 815

Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser Asp Pro Leu Pro
 820 825 830

Ala Thr Ser Ser His Ser Gly Asp Ser Ala Gln Asp Thr Ser Leu Ile
 835 840 845

Pro Ala Pro Phe Thr Pro Ala Ser Arg Asp Ala Gly Ile Arg Arg
 850 855 860

<210> 142
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 142

Met Ser Tyr Leu Ser Leu Leu Leu Ile Ser Ile Phe Met Val Cys Tyr
 1 5 10 15

Phe Lys Arg Asn Ser Phe Pro Ile Thr Ile Leu Phe Ser
 20 25

<210> 143
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 143

Met Pro Trp Pro Met Pro Ile Cys Thr Gly Thr Gln Gly Val Leu Thr
 1 5 10 15

His Arg Gln Gly Pro Pro Ala Ala Val Gly Val Ser Pro His Thr

80

20

25

30

<210> 144
<211> 29
<212> PRT
<213> Homo sapiens

<400> 144

Met Asn Ala Phe Leu Leu Glu Arg Met Thr Glu Ser Gln Ala Met Asp
1 5 10 15

Ile Gln Thr Cys Ile Phe Gln Thr Leu Leu Glu Asn Lys
20 25

<210> 145
<211> 48
<212> PRT
<213> Homo sapiens

<400> 145

Met Ile Val Thr Asn Thr Ile Leu Lys Phe Ile His Lys Lys Pro Thr
1 5 10 15

Thr Ile Thr Pro Thr Lys Gln His Gly Ile Ile Phe Ser Val Pro Glu
20 25 30

Ala Lys Val Arg Ala Leu Leu Cys Phe Leu Leu Arg Met Pro Ser Pro
35 40 45

<210> 146
<211> 55
<212> PRT
<213> Homo sapiens

<400> 146

Gly Gln Ala Leu Trp Leu Met Pro Val Ile Pro Val Val Ala Lys Ala
1 5 10 15

Glu Gly Lys Asp His Leu Arg Pro Gly Val Ala Asn Gln Pro Gly Gln
20 25 30

His Ser Lys Thr Leu Phe Leu Gln Lys Lys Asn Phe Ala Lys Leu Ala
35 40 45

Glu His Gly Gly Ala Cys Leu
50 55

<210> 147

<211> 55
<212> PRT
<213> Homo sapiens

<400> 147

Met Ser Arg Phe Arg Ile Gln Thr Ser Glu Thr Ala Pro Ile Pro Leu
1 5 10 15

Val Ser His Pro His Thr Pro Leu Ser Asn Asn Asn Asn Leu His Leu
20 25 30

Gly Asn Val Cys Tyr Val Pro Gly His Thr Gly Ile Ile Ser Cys Thr
35 40 45

Pro His Arg His Leu Ile Lys
50 55

<210> 148

<211> 50

<212> PRT

<213> Homo sapiens

<400> 148

Met Gln Gly Leu His Leu Pro Gln Gly Leu Gly Thr Cys Tyr Ser Ile
1 5 10 15

Cys Leu Gln Cys Leu Ser Pro His Gly Tyr Phe Phe Val Ala Val Gly
20 25 30

Leu Ser Ser Asn Val Met Ser Pro Thr Ser Leu Pro Lys Ala Val Leu
35 40 45

Pro Thr
50

<210> 149

<211> 31

<212> PRT

<213> Homo sapiens

<400> 149

Met Leu Pro Val Asn Ile Ser His Pro Leu Ser Arg Gly Asn Pro Leu
1 5 10 15

Leu Ser Ser Lys Phe Ser Lys Phe Phe Leu Ile Glu Phe Ser Gln
20 25 30

<210> 150

<211> 36
<212> PRT
<213> Homo sapiens

<400> 150

Met Asp Tyr Ser Leu Ser Phe Asp Asn Tyr Thr Trp Gly Phe Gly Glu
1 5 10 15

Pro Arg Ile Lys Val Gln Ser Phe Asn Asp Leu Leu Ala Pro Gly Leu
20 25 30

Thr Gln Glu His
35

<210> 151
<211> 85
<212> PRT
<213> Homo sapiens

<400> 151

Met Ile Arg Ser Lys Gly Thr Asn Phe Gln Ile Leu Ala Glu Leu Phe
1 5 10 15

Lys Gly Met Asp Phe Leu Trp Leu Gln Leu Ala Arg Leu Phe Gln Lys
20 25 30

Ala Cys Pro Trp Leu Thr Ala Cys Leu Ala Gln Phe Leu Arg Ser Pro
35 40 45

Leu Val Met Glu Asn Arg Ala Asp Arg Ile Gln Met Ala Arg Phe His
50 55 60

Arg Gly Gln Gly Gly Pro Gln Ser Ala Asn Gln Gly Arg Leu Arg Pro
65 70 75 80

Glu Lys Gly Ile Ser
85

<210> 152
<211> 73
<212> PRT
<213> Homo sapiens

<400> 152

Met Asp Arg Phe Leu Asn Ser Lys Ala Arg Arg Leu Gly Ser Cys Ser
1 5 10 15

His Pro Ala Phe Tyr Leu Leu Cys Val Pro Asp Glu Asp Thr Ser Cys

20

25

30

Ser Thr Met Tyr Leu Pro Leu Lys Arg Arg Ala Asp Pro Asp Gln Leu
35 40 45

Phe Ser Asp Leu Leu Gly Gly Thr Gln Arg Leu Trp Arg Leu Trp Pro
50 55 60

Ser Leu Ala Ser Val Glu Ser Gly Leu
65 70

<210> 153

<211> 63

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (5)..(43)

<223> X=any amino acid

<400> 153

Met Gln Cys Thr Xaa
1 5 10 15

Xaa
20 25 30

Xaa Lys Ile Lys Phe Gly
35 40 45

Met Lys Gln Glu Leu Ser Trp Thr Ile Tyr Asn Leu Leu Arg Tyr
50 55 60

<210> 154

<211> 46

<212> PRT

<213> Homo sapiens

<400> 154

Met Arg Cys Leu Leu Ala Asp Ser Ser Leu Gln Met Gln Pro Gly Asp
1 5 10 15

Val Thr Leu Arg Leu Glu Ser Cys Gly Ser Asn Pro Arg Gln Arg Gln
20 25 30

Leu His Gln Val Leu Val Trp Val Arg Asn Arg Gly Lys Gly
35 40 45

<210> 155
 <211> 72
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (22)..(22)
 <223> X=any amino acid

<400> 155

Met Pro Pro Arg Gly Trp Ala Cys Pro Ser Ser Gly Pro Pro Ala Pro
 1 5 10 15

Gly Pro Gly Arg Trp Xaa Arg Ala Ala Ala Gly Gly Leu Arg Arg Thr
 20 25 30

Arg Cys Asp Trp Leu Pro Leu Arg Arg Thr Gln Met Ser Leu Arg Arg
 35 40 45

Ile Asp Leu Leu Pro Ser Pro Ala Gly Gln Ala Gln Ala Gly Ser Glu
 50 55 60

Asn Tyr Leu Pro Leu Phe Ile Ser
 65 70

<210> 156
 <211> 20
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (10)..(10)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (13)..(14)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (16)..(16)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (20)..(20)

<223> X=any amino acid

<400> 156

Met Val Phe Ile Phe Ser Thr Thr Ile Xaa Phe Phe Xaa Xaa Glu Xaa
1 5 10 15

Glu Ser Cys Xaa
20

<210> 157

<211> 66

<212> PRT

<213> Homo sapiens

<400> 157

Met Ser Leu Thr Tyr Ser Trp Lys Lys Ser Lys Val Thr Lys Phe Asn
1 5 10 15

Leu Ser Thr Leu Arg Met Thr Val Thr Asn Lys Asn Arg Thr Val Gln
20 25 30

Lys Cys Ala Lys Asp Thr Arg Lys Leu Asn Asn Ile Asn Ser Met Ile
35 40 45

Ile Val Ile Leu Tyr Thr Met Glu Ser Lys Gln Ile Phe Phe His Gly
50 55 60

Asn Ser

65

<210> 158

<211> 41

<212> PRT

<213> Homo sapiens

<400> 158

Met Met Thr Gly Glu Ala Arg Glu Ser Gln Ile Ala Leu Tyr Lys Gln
1 5 10 15

Arg Phe Arg Glu Phe Arg Glu Glu Gly Arg Thr Ile Tyr Lys Gly Arg
20 25 30

Trp Lys Arg Ser His Leu Ala Glu Gly
35 40

<210> 159

<211> 31

<212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (7)...(7)
 <223> X=any amino acid

<400> 159

Met Leu Glu Leu Gly Leu Xaa Pro Lys Leu Thr Ser Glu Tyr Arg Phe
 1 5 10 15

Pro Pro Asn Cys Met Ile Leu His Ile Trp Ser Gln Leu Glu Val
 20 25 30

<210> 160
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 160

Met Tyr Ile Tyr Ile Cys His His Phe Lys Asn Gln Ala Phe Lys Val
 1 5 10 15

Lys Leu Ser Phe Pro His Ile Phe Phe His Ser Ile Phe Tyr Gln Tyr
 20 25 30

Arg His Ser Leu Leu Leu Leu Ser Phe Gln Phe Pro Ile Ile Ser Ser
 35 40 45

His Pro Ile Phe Cys Ala Ser Ser Val Phe Lys Thr His Ser Pro Ser
 50 55 60

Ala Ala Met Ala Pro Thr Ile Ile Phe Ile Thr
 65 70 75

<210> 161
 <211> 36
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (7)...(13)
 <223> X=any amino acid

<400> 161

Met Lys Arg Gly Asn Leu Xaa Xaa Xaa Xaa Xaa Xaa Gly Thr Pro
 1 5 10 15

Cys Lys Asp Trp Ser His Thr Ala Met Ser Gln Glu Pro Pro Val Leu
20 25 30

Val Arg Val Leu
35

<210> 162
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> X=any amino acid

<400> 162

Met Trp Ala Ala Trp Arg Arg Arg Xaa Asn Gly Phe Phe Pro Arg Ile
1 5 10 15

Pro Gly Lys Xaa Arg Gly Pro Asn
20

<210> 163
<211> 31
<212> PRT
<213> Homo sapiens

<400> 163

Met Cys His Ser Leu Tyr Arg Phe Leu Asn Cys His Ser Arg Tyr Tyr
1 5 10 15

Ile Val Tyr Thr Tyr Leu Thr Ile Phe Tyr Trp Cys His His Phe
20 25 30

<210> 164
<211> 134
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (2)..(22)
<223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (39)..(67)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (79)..(113)
 <223> X=any amino acid

<400> 164

Met Xaa
 1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Ala Gly Lys Arg Glu Asn Gln Lys Asp Ser
 20 25 30

Ser Val Arg Arg Thr Trp Xaa
 35 40 45

Xaa
 50 55 60

Xaa Xaa Xaa Arg Phe Ser Pro Arg Ala Tyr Arg Lys Lys Val Xaa Xaa
 65 70 75 80

Xaa
 85 90 95

Xaa
 100 105 110

Xaa Arg His Asn Arg Lys Leu Ile His Leu Ser Ser Lys Phe Leu Ile
 115 120 125

Ile Asn Val Ile Ala Ser
 130

<210> 165
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 165

Met Ser Lys Val Asp Leu Phe Ile Thr Asp Ser Phe Lys Lys Phe Asn
 1 5 10 15

Gln Tyr Leu Leu Ala Thr Tyr Ser Thr Ser Gly Thr Gln Gly Ile Trp
 20 25 30

Ser Thr Thr Met Lys Lys Arg Asp Trp Thr Leu Lys Glu His Arg Ser
 35 40 45

Cys His Phe
 50

<210> 166
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 166

Met Ser Asp Ser Arg Leu Cys Ser Cys Phe Leu His Thr Leu Ile Phe
 1 5 10 15

Leu Asn Ile Ser Lys Ile Gln Ser Gly Ser Lys Ile Thr Cys Lys Asn
 20 25 30

Ile Leu Ala Gln Glu Phe Asp Arg Leu Lys Ile Asn Tyr Leu Lys Tyr
 35 40 45

Ile Lys Gln Glu Val Tyr Leu Leu Tyr Ser Met Tyr
 50 55 60

<210> 167
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 167

Met Val Phe Gln Lys Thr Ser Leu Tyr Ser Asn Asn Ile Leu Leu
 1 5 10 15

<210> 168
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 168

Cys Pro Ala Ala Tyr Thr Val Phe Leu Thr Arg Ile Ile Val Lys Tyr
 1 5 10 15

Tyr Leu Asn Arg Gly Leu Phe Ser Glu Thr Pro Ser Asn Leu Lys Val
 20 25 30

Glu Glu Lys Gly Trp Val Trp Trp Leu Met Pro Val Thr Pro Ala Leu
 35 40 45

Trp Glu Ala Glu Ala Gly Gly Ser Leu Glu Leu Ser Leu Arg Pro Gly
 50 55 60

Trp Ala Thr Pro Ser Leu Pro Lys Asn Thr Lys Met Ser Gln Ala Trp
 65 70 75 80

Trp Cys Thr Pro Val Val Pro Ala Ala Leu Gly Ala Glu Val Gly Gly
 85 90 95

Arg Leu Gly Pro Arg Arg Trp Arg Leu Gln
 100 105

<210> 169
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 169

Met Gly Pro Asp Arg Leu Lys Gln Lys Ser Asn Thr Ala Val Val Ser
 1 5 10 15

Arg Trp Ile

<210> 170
 <211> 47
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (3)...(4)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (13)...(13)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (16)...(16)
 <223> X=any amino acid

<400> 170

Met Asp Xaa Xaa Lys Trp Arg Met Arg Arg Gln Pro Xaa Ile Asn Xaa
 1 5 10 15

Met Tyr Gln Thr Val Thr Ile Cys Glu Glu Tyr Cys Val Tyr Thr Asn
 20 25 30

Arg Lys Gln Leu Lys Ala Phe Asn Met Cys Gly Trp Gly Glu Arg
 35 40 45

<210> 171

<211> 197

<212> PRT

<213> Homo sapiens

<400> 171

Gln Glu Ala Gln Ile Met Lys Lys Leu Arg His Asp Lys Leu Val Pro
 1 5 10 15

Leu Tyr Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr Glu Phe
 20 25 30

Met Ser Lys Gly Ala Tyr Ser Leu Ser Ile Arg Asp Trp Asp Glu Ile
 35 40 45

Arg Gly Asp Asn Val Lys His Tyr Lys Ile Arg Lys Leu Asp Asn Gly
 50 55 60

Gly Tyr Tyr Ile Thr Thr Arg Ala Gln Phe Asp Thr Leu Gln Lys Leu
 65 70 75 80

Val Lys His Tyr Thr Glu His Ala Asp Gly Leu Cys His Lys Leu Thr
 85 90 95

Thr Val Cys Pro Thr Val Lys Pro Gln Thr Gln Gly Leu Ala Lys Asp
 100 105 110

Ala Trp Glu Ile Pro Arg Glu Ser Leu Arg Leu Glu Val Lys Leu Gly
 115 120 125

Gln Gly Cys Phe Gly Glu Val Trp Met Gly Thr Trp Asn Gly Thr Thr
 130 135 140

Lys Val Ala Ile Lys Thr Leu Lys Pro Gly Thr Met Met Pro Glu Ala
 145 150 155 160

Phe Leu Gln Glu Ala Gln Ile Met Lys Lys Leu Arg His Asp Lys Leu

92

165

170

175

Val Pro Leu Tyr Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr
180 185 190

Glu Phe Met Ser Lys
195

<210> 172
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (28)..(49)
<223> X=any amino acid

<400> 172

Met Cys Ile Met His Ile Asn Thr Phe Asn Leu Cys Asn His Leu Met
1 5 10 15

Arg Trp Leu Leu Leu Lys Ser Pro Leu Cys Thr Xaa Xaa Xaa Xaa Xaa
20 25 30

Xaa
35 40 45

Xaa Gln Lys Pro Lys Pro Thr Val His Gly Ile
50 55

<210> 173
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (14)..(21)
<223> X=any amino acid

<400> 173

Met Lys Pro Ile Arg Gln Leu Val Pro Phe Thr Leu Glu Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Leu Tyr Leu Glu His Leu Thr Cys Arg Lys Arg
20 25 30

Arg Gly Lys Thr Phe Leu Gly Lys Arg Lys Ala Val Ala Val Pro Lys
 35 40 45

Ser Lys His Phe Trp Gln Gly Phe
 50 55

<210> 174
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 174

Met Leu Lys His Leu Gln Val Leu Asp Leu His Gln Cys Ser Leu Thr
 1 5 10 15

Ala Asp Asp Val Met Ser Leu Thr Gln Val Ile Pro Leu Leu Ser Asn
 20 25 30

Leu Gln Glu Leu Asp Leu Ser Ala Asn Lys Lys Met Gly Ser Ser Ser
 35 40 45

Glu Asn Leu Leu Ser Arg Leu Arg Phe Leu Pro Ala Leu Lys Ser Leu
 50 55 60

Val Ile Asn Asn Cys Ala Leu Glu Ser Glu Thr Phe Thr Ala Leu Ala
 65 70 75 80

Glu Ala Ser Val His Leu Ser Ala Leu Glu Val Phe Asn Leu Ser Trp
 85 90 95

Glu Gln Val Cys Trp Trp Ala Thr
 100

<210> 175
 <211> 490
 <212> PRT
 <213> Homo sapiens

<400> 175

Met Ser Gln Thr Arg Lys Lys Thr Ser Ser Glu Gly Glu Thr Lys Pro
 1 5 10 15

Gln Thr Ser Thr Val Asn Lys Phe Leu Arg Gly Ser Asn Ala Glu Ser
 20 25 30

Arg Lys Glu Asp Asn Asp Leu Lys Thr Ser Asp Ser Gln Pro Ser Asp
 35 40 45

Trp Ile Gln Lys Thr Ala Thr Ser Glu Thr Ala Lys Pro Leu Ser Ser
 50 55 60

Glu Met Glu Trp Arg Ser Ser Met Glu Lys Asn Glu His Phe Leu Gln
 65 70 75 80

Lys Leu Gly Lys Lys Ala Val Asn Lys Cys Leu Asp Leu Asn Asn Cys
 85 90 95

Gly Leu Thr Thr Ala Asp Met Lys Glu Met Gly Glu Ala Phe Glu Met
 100 105 110

Ile Pro Glu Leu Glu Leu Asn Leu Ser Trp Asn Ser Lys Val Gly
 115 120 125

Gly Asn Leu Pro Leu Ile Leu Gln Lys Phe Gln Lys Gly Ser Lys Ile
 130 135 140

Gln Met Ile Glu Leu Val Ala Cys Ser Leu Thr Ser Glu Asp Gly Thr
 145 150 155 160

Phe Leu Gly Gln Leu Leu Pro Met Leu Gln Ser Leu Glu Val Leu Asp
 165 170 175

Leu Ser Ile Asn Arg Asp Ile Val Gly Ser Leu Asn Ser Ile Ala Gln
 180 185 190

Gly Leu Lys Ser Thr Ser Asn Leu Lys Val Leu Lys Leu His Ser Cys
 195 200 205

Gly Leu Ser Gln Lys Ser Val Lys Ile Leu Asp Ala Ala Phe Arg Tyr
 210 215 220

Leu Gly Glu Leu Arg Lys Leu Asp Leu Ser Cys Asn Lys Asp Leu Gly
 225 230 235 240

Gly Gly Phe Glu Asp Ser Pro Ala Gln Leu Val Met Leu Lys His Leu
 245 250 255

Gln Val Leu Asp Leu His Gln Cys Ser Leu Thr Ala Asp Asp Val Met
 260 265 270

Ser Leu Thr Gln Val Ile Pro Leu Leu Ser Asn Leu Gln Glu Leu Asp
 275 280 285

Leu Ser Ala Asn Lys Lys Met Gly Ser Ser Ser Glu Asn Leu Leu Ser
 290 295 300

Arg Leu Arg Phe Leu Pro Ala Leu Lys Ser Leu Val Ile Asn Asn Cys
 305 310 315 320

Ala Leu Glu Ser Glu Thr Phe Thr Ala Leu Ala Glu Ala Ser Val His
 325 330 335

Leu Ser Ala Leu Glu Val Phe Asn Leu Ser Trp Asn Lys Cys Val Gly
 340 345 350

Gly Asn Leu Lys Leu Leu Leu Glu Thr Leu Lys Leu Ser Met Ser Leu
 355 360 365

Gln Val Leu Arg Leu Ser Ser Cys Ser Leu Val Thr Glu Asp Val Ala
 370 375 380

Leu Leu Ala Ser Val Ile Gln Thr Gly His Leu Ala Lys Leu Gln Lys
 385 390 395 400

Leu Asp Leu Ser Tyr Asn Asp Ser Ile Cys Asp Ala Gly Trp Thr Met
 405 410 415

Phe Cys Gln Asn Val Arg Phe Leu Lys Glu Leu Ile Glu Leu Asp Ile
 420 425 430

Ser Leu Arg Pro Ser Asn Phe Arg Asp Cys Gly Gln Trp Phe Arg His
 435 440 445

Leu Leu Tyr Ala Val Thr Lys Leu Pro Gln Ile Thr Glu Ile Gly Met
 450 455 460

Lys Arg Trp Ile Leu Pro Ala Ser Gln Glu Glu Leu Glu Cys Phe
 465 470 475 480

Asp Gln Asp Lys Lys Lys His Ser Leu
 485 490

<210> 176
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 176

Met His Leu Leu Ser Asp Gly Lys Glu Gly Ser Thr Tyr Lys Pro Phe
 1 5 10 15

Gln Glu Ile Ser Ser Ser Lys Ser Gly Arg Lys Gly Ser Lys Ala
20 25 30

Thr Ile Ser Phe Met Ser Ala Val Val Asn Pro Gln Leu Phe Lys Ser
35 40 45

Arg His Leu Leu Thr Ala Phe Leu Pro Ser Phe Cys Arg Lys Cys Ser
50 55 60

Phe Phe Ser Ile Leu Asp Leu His Ser Ile Ser Glu Leu Arg Gly Leu
65 70 75 80

Ala Val Ser Glu Val Ala Val Phe Cys Ile Gln Ser Leu Gly Trp Glu
85 90 95

Ser Leu Val Leu Arg Ser Leu Ser Ser Phe Leu Leu Ser Ala Leu Glu
100 105 110

Pro Leu Arg Asn Leu Leu Thr Val Glu Val Trp Gly Leu Val Ser Pro
115 120 125

Ser Glu Glu Val Phe Phe Leu Val
130 135